



City of Poway

2010 Urban Water Management Plan

Adopted June 7, 2011

Contents

	<u>Page</u>
Section 1 Plan Preparation	1
1.1 Introduction	1
1.2 Coordination	1
1.3 Plan Adoption, Submittal, and Implementation	2
 Section 2 System Description	 3
2.1 Introduction	3
2.2 Service Area	3
2.3 Service Area Physical Description	4
2.4 Service Area Population	4
2.5 Service Area Land Use	5
2.6 Service Area Climate	6
 Section 3 System Demands	 7
3.1 Introduction	7
3.2 Water Demands	7
3.2.1 Current Water Use	7
3.2.2 Major Water Use Sectors	8
3.2.3 Water Loss	8
3.3 Baselines and Targets	9
3.3.1 Potable and Recycled Water Demand Projections	10
3.4 Projected Dry Year Water Demands	12
3.4.1 Single Dry Year Demand	12
3.4.2 Multiple Dry Year Demands	13
3.5 Water Use Reduction Plan	15

Section 4	System Supplies	18
4.1	Water Sources	18
4.1.1	San Diego County Water Authority and Metropolitan Water District	18
4.1.2	Current and Projected Supplies	18
4.1.3	Storage Reservoirs and Lake Poway	19
4.1.4	Lester J. Berglund Water Treatment Plant	19
4.1.5	Surface Water and Watersheds	20
4.1.6	Water Service Administration	21
4.1.7	Capital Improvement Program	21
4.2	Groundwater	22
4.3	Transfer Opportunities	23
4.4	Desalinated Water Opportunities	23
4.5	Recycled Water Opportunities	23
4.5.1	Introduction	23
4.5.2	Coordination	24
4.5.3	Wastewater Collection and Treatment Systems	24
4.5.4	Existing Recycled Water Distribution System	25
4.5.5	Recycled Water Opportunities	26
Section 5	Water Supply Reliability and Water Shortage Contingency Planning	29
5.1	Introduction	29
5.2	Water Supply Reliability	29
5.2.1	Maximizing Resources and Minimizing Need to Import Water from Other Regions	29
5.2.2	San Diego County Water Authority Supplies	29
5.3	Water Supply Contingency Planning	31
5.3.1	Introduction	31
5.3.2	Catastrophic Interruption	31
5.3.3	Water Shortage Contingency Legislation	33
5.3.4	Consumption Reduction Methods and Mandatory Prohibitions During Water Shortages	33
5.3.5	Penalties and Charges for Violating Restrictions and Prohibitions	36
5.3.6	Financial Impact of Water Shortages	36
5.4	Water Quality	37
5.4.1	Colorado River	38
5.4.2	State Water Project	38
5.4.3	Local Water Supplies	38

5.5	Water Shortage Contingency Planning	39
5.5.1	Water Supply Vulnerability	39
5.5.2	Stages of Action During Shortages	39
5.5.3	Estimate of Minimum Available Water Supply During Next Three Years	39
5.5.4	Measurement and Determination of Actual Water Savings	40
5.5.5	Assessment of Water Supply During Normal, Dry, and Multiple Dry Years	40
Section 6	Demand Management Measures	44
6.1	Demand Management Measures	44
6.2	Evaluation of Demand Management Measure Effectiveness	46
6.3	Water Savings Attributable to Demand Management Measures	47
Section 7	Projected Climate Change Impact on Water Demands	48
Appendix A	California Urban Water Management Planning Act and SBX7-7	
Appendix B	Required Tables for 2010 Urban Water Management Plan	
Appendix C	City of Poway 2010 Urban Water Management Plan Implementation Documents	
Appendix D	Department of Water Resources 2010 Urban Water Management Plan Checklist	
Appendix E	Map of Poway	
Appendix F	Poway Municipal Code – Chapter 8.94 – Water Conservation Plan	
Appendix G	California Urban Water Conservation Council 2009 and 2010 Best Management Practice Reports	

Tables and Figures

<u>Tables</u>		<u>Page</u>
1	City of Poway Coordination with Public and Agencies to Prepare 2010 UWMP	2
2	City of Poway Population and Housing Projections	5
3 and 4	Actual Water Deliveries – 2005 and 2010	7
14 and 15	Base Daily Per Capita Water Use	9
5, 6, and 7	Projected Water Deliveries	11
8	Affordable Housing Projected Water Demands	11
16	Water Supplies - Current and Projected	19
18	Groundwater – Volume Pumped	22
19	Groundwater – Volume Projected to be Pumped	22
20	Transfer and Exchange Opportunities	23
21	Recycled Water – Wastewater Collection and Treatment	25
22	Non-Recycled Wastewater Disposal	25
23	Recycled Water Potential Future Use	27
24	Recycled Water – 2005 UWMP Use Projection Compared to 2010 Actual	28
25	Methods to Encourage Recycled Water Use	28
36	Water Shortage Contingency – Water Use Efficiency Measures	34
37	Water Shortage Contingency – Consumption Reduction Methods	35

<u>Figures</u>		<u>Page</u>
1	Poway Rainfall in Recent Years	6
2	2010 Climate Data for Poway Area	6
3	System Water Loss Data	9
4	Projected Water Use	12
5	Single Dry Year Demand Forecast	13
6	Multiple Dry Year Demand Forecasts	13
7	City of Poway Water Rate Structure (Variable Portion Only)	21
8	Catastrophic Supply Interruption Plan	31
9	Summary of Water Conservation Plan Enforcement Provisions	36
10	Available Supplies for Poway During Next Three Years	40
11	SDCWA Supply Reliability Scenarios	43

Acronyms and Abbreviations

Act	California Urban Water Management Planning Act of 1983
AF	Acre-Feet
AF/YR	Acre-Feet per Year
BMP	Best Management Practice
CEQA	California Environmental Quality Act
City	City of Poway
CUWCC	California Urban Water Conservation Council
DMM	Demand Management Measure
DWR	California Department of Water Resources
ESP	Emergency Storage Project
GPCD	Gallons per Capita per Day
IID	Imperial Irrigation District
LAFCO	Local Agency Formation Commission
MAF	Million Acre-Feet
MG	Million Gallons
MGD	Million Gallons per Day
MOU	Memorandum of Understanding
MWD	Metropolitan Water District of Southern California
QSA	Quantification Settlement Agreement
SANDAG	San Diego Association of Governments
SBX7-7	Senate Bill 7 of the Seventh Extraordinary Session of 2009 (Water Code § 10608); also known as the Water Conservation Act of 2009
SCADA	Supervisory Control and Data Acquisition
SDCWA	San Diego County Water Authority
TAF	Thousand Acre-Feet
TDS	Total Dissolved Solids
UWMP	Urban Water Management Plan

1.1 INTRODUCTION

The California Water Code (Appendix A) requires all urban water suppliers in the state to prepare urban water management plans and update them every five years to satisfy the requirements of the California Urban Water Management Planning Act of 1983 and amendments. The Act requires that each urban water supplier that provides water for municipal purposes, whether directly or indirectly, to more than 3,000 customers or supplies more than 3,000 AF of water per year shall prepare, update, and adopt its Urban Water Management Plan (UWMP) at least once every five years. The UWMP reviews water use trends, supply, and demand projections for the next 25 years.

The City of Poway is an urban water supplier providing service to approximately 13,946 connections (potable and recycled), all metered. The UWMP is a planning document for the City of Poway and regional decision makers, and it will provide the public with information about water service.

1.2 COORDINATION

(Legislative Requirements 4, 6 and 54)

The San Diego County Water Authority (SDCWA) is the region's water wholesaler. It is comprised of 24 member agencies including Poway. Its UWMP addresses the regional issues concerning San Diego County water demands and supplies. The Metropolitan Water District of Southern California (MWD) provides data on projected imported water deliveries.

While preparing the 2010 UWMP, Poway coordinated its efforts with a number of agencies to ensure that data and issues are presented accurately, including: SDCWA, the City of San Diego Public Utilities Department, the City of Escondido, and the San Diego Association of Governments (SANDAG).

As required, the City of Poway notified the County of San Diego sixty (60) days prior to the June 7, 2011 City Council Public Hearing regarding the UWMP. The City of Poway does not provide water service within any other municipal jurisdiction. As a courtesy, the City of Poway also provided sixty-day notice to the City of San Diego, SANDAG, and San Diego County Local Agency Formation Commission (LAFCO).

Poway used the California Department of Water Resources' (DWR) *Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan*. As required by the Water Code, Poway sent a copy of its adopted UWMP to DWR, the California State Library, and SDCWA.

DWR requires 38 data tables in a particular format be provided as part of the UWMP. Many of the required tables are incorporated within the body of the plan. Appendix B includes a complete set of all required data tables.

Table 1 – City of Poway Coordination with Public and Agencies to Prepare 2010 UWMP

Agency	Participation in Plan Development	UWMP Meetings	Commented on Draft	Contacted for Assistance	Received Final	Sent Notice of Intent to Adopt
California Department of Water Resources		X		X	X	
California State Library					X	
San Diego County Water Authority	X	X		X	X	X
City of San Diego Public Utilities				X		X
City of San Diego Planning Department						X
City of Escondido				X		
County of San Diego						X
San Diego County Local Agency Formation Commission						X
San Diego Association of Governments (SANDAG)				X		X
General Public			X		X	

1.3 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION (Leg. Requirements 7, 55, 56, 57, 58, 59, 60)

The Poway City Council adopted its 2010 UWMP by Resolution No. 11-030 at a public hearing on June 7, 2011 (see Appendix C). City Council meetings are open to the public. Information on agenda items is available in advance of the meeting. Anyone can participate and provide comments to the City Council on items being considered.

The adopted UWMP was submitted to DWR, the State of California Library, the County of San Diego, and SDCWA on June 28, 2011. Poway's 2010 UWMP is available for review on the City's web site at www.poway.org and at the City Clerk's Office, located at 13325 Civic Center Drive, Poway, California, 92064.

Copies of the Notice of Public Hearing published in the *Poway News Chieftain*, the City Council agenda report, and the signed resolution of adoption are included in Appendix C.

Appendix D includes the DWR 2010 UWMP Checklist to identify which sections of Poway's 2010 UWMP address the legislative requirements established in the Water Code.

2.1 INTRODUCTION

The City of Poway is the water supplier within its jurisdiction. The City of Poway imports nearly 100 percent of its water supply, largely from SDCWA, in the form of raw, untreated water.

The City owns and operates the Lester J. Berglund Water Treatment Plant to provide all potable water for the City. The distribution system includes eighteen storage reservoirs. These potable water reservoirs range in capacity from 300,000 gallons to 10 million gallons (MG) and exist to maintain adequate supplies during peak demand, for fire flow, or other emergencies. All of these reservoirs are covered to prevent losses from evaporation and reduce pollution or contamination risks. Most of these reservoirs are constructed of plate steel, one is a pre-stressed concrete structure, and the 10 MG clearwell reservoir is earthen polyethylene-lined, with a hypolon rubberized fabric-floating cover. The City's largest reservoir, Lake Poway, is a man-made surface storage reservoir, with a maximum capacity of 3,400 AF. It provides storage for emergencies and buffers the effects of peak seasonal water demands. Two new storage reservoirs built by a developer as part of a new residential development (10,000 gallons and 500,000 gallons) are scheduled to begin operation in mid-2011.

Poway's water treatment and distribution system is continuously monitored to ensure compliance with State and Federal regulations. The City manages its water system 24-hours per day with staff and computer SCADA systems to maximize water resources and minimize importation of raw water. The infrastructure is maintained daily and is regularly upgraded. The City's Water Master Plan was updated in 2008 and describes the plans for modifications to existing infrastructure (e.g., pipelines, storage reservoirs, and pumping stations) and new infrastructure to accommodate the City's projected water demands.

Poway also purchases recycled water (approximately 550 AF per year) from the City of San Diego for irrigation in the Poway Business Park.

2.2 SERVICE AREA *(Legislative Requirement 8)*

Water has always been crucial in the Poway area. Early settlers and ranchers in the late 1800s depended on wells. Water service became a municipal function in the Poway vicinity in 1954 when SDCWA's aqueduct was constructed and the Poway Municipal Water District was formed. In 1971, the directors of the water district made plans for expanded water treatment and emergency storage capacity. Voters in the district approved a bond to construct the Lake Poway Dam. Lake Poway became operational as a water reservoir and recreational area in 1972. Major modifications to the plant were completed in 1974. Poway incorporated as a general law city on December 1, 1980, and merged the Poway Municipal Water District and the Pomerado County Water District to establish a municipality. A Council-City Manager form of government administers the City. The Mayor and Council members are non-partisan and are elected to serve staggered four-year terms. The Council appoints the City Manager to run the daily municipal operations.

The City of Poway purchases most of its water supply from SDCWA. Poway is one of 24 member water agencies of the SDCWA. SDCWA is a wholesaler of imported water it purchases from MWD and transports through five large diameter pipelines to member agency service connections. Poway purchases raw or untreated water from SDCWA. The water is delivered via pipeline from Lake Skinner in Riverside County and is then treated at the City's Lester J. Berglund Water Treatment Plant for distribution to Poway's customers.

SDCWA was established pursuant to legislation adopted by the California State Legislature in 1943 to provide a supplemental supply of water as the San Diego region's civilian and military population expanded. Due to the strong military presence, the federal government arranged for water from the Colorado River in the 1940s. In 1947, water began to be imported from the Colorado River via a single pipeline that connected to MWD's Colorado River Aqueduct located in Riverside County. To meet the water demand for a growing population and economy, SDCWA constructed four additional pipelines between the 1950s and early 1980s that are all connected to MWD's conveyance system and deliver water to San Diego County.

MWD, formed in 1928, supplies water to approximately 18 million people in a service area that includes portions of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego counties. SDCWA is one of 27 MWD member agencies and is the largest agency in terms of water deliveries.

2.3 SERVICE AREA PHYSICAL DESCRIPTION *(Legislative Requirement 8)*

The City of Poway encompasses 39 square miles and is located in San Diego County, 20 miles north of downtown San Diego and 125 miles south of Los Angeles. Poway borders the City of San Diego on two sides, including the communities of Scripps Ranch to the south and Sabre Springs, Rancho Peñasquitos and Rancho Bernardo to the west. The City of Escondido is just north of Poway, and the unincorporated community of Ramona is to the east. Poway is one mile east of Interstate 15, which links San Diego, Riverside, Los Angeles and Orange Counties. The elevation of Poway ranges from 480 to 2,250 feet above sea level. A map of the City of Poway is attached in Appendix E.

2.4 SERVICE AREA POPULATION *(Legislative Requirements 10, 11, and 12)*

The population of the entire City of Poway grew from 50,509 in 2005 to 52,056 in 2010. The increase of 3.06 percent is consistent with UWMP projections. Per the General Plan, Poway is expected to reach build out by 2030 with a population of approximately 56,000.

A small portion of the City of Poway is not connected to the water system. Therefore, the population for this area was estimated and subtracted from historic and future population figures. With this methodology, the portion of Poway's population served by the water system for 2010 was 51,789 as shown in Table 2.

According to statistics from SANDAG, the number of single-family, multi-family, and mobile home households in Poway in 2010 was 16,364. Single-family homes represented 79.5 percent of the total housing stock, multi-family homes represented 16.2 percent, and mobile homes accounted for 4.3 percent.

Over the next twenty years from 2010 to 2030, the City's housing stock is estimated to increase by 11 percent to 18,216 dwelling units. The distribution of housing units is expected to remain the same with single-family homes comprising the majority of Poway's housing stock. The average number of people per household in Poway is three. This average is not projected to change over the next 20 years. The SANDAG forecast is consistent with the City's land use policies.

Table 2 - City of Poway Population and Housing Projections¹

	2010	2015	2020	2025	2030	2035
Service Area Population²	51,789	52,020	53,789	55,458	57,661	58,164
Service Area Total Housing Units³	16,364	16,676	17,226	17,669	18,216	18,209

¹ SANDAG Series 12 Forecast

² Service area population equals total City population, minus area not served by water system.

³ Total housing units includes single-family and multi-family housing units.

2.5 SERVICE AREA LAND USE

(Legislative Requirements 8 and 12)

The City of Poway's General Plan and land use priority is to preserve a balance between the community's rural character and well-planned residential/commercial/industrial development. The General Plan, adopted in November 1991, calls for maintaining nearly 70 percent of the City's land as open space to provide the community with a natural buffer. An additional five percent is agriculture. The majority of open space is located in the foothills that surround Poway. Other open space areas include Lake Poway, the Blue Sky Ecological Reserve, and the Twin Peaks and Boulder Mountain areas.

Poway experienced a significant increase in commercial and light industrial development over the past twenty years, primarily in the Poway Business Park, a 700-acre complex offering tenants high-quality infrastructure, numerous amenities, and plenty of open space in keeping with the City's rural surroundings. The Business Park meets the needs of light industrial and manufacturing, warehousing and distribution, and research and development businesses. There are 7.8 million square feet of building space, and some development capacity remains. Currently, over 460 businesses with more than 17,000 employees are located in the Business Park. Landscaping in the Poway Business Park generally uses recycled water purchased from the City of San Diego and piped through a dedicated meter and distribution system. City staff routinely inspects the 12-mile recycled water distribution system for excess runoff and other discrepancies to ensure adherence to all regulatory requirements, including Poway's Rules and Regulations for Recycled Water Use, adopted by the City Council on September 30, 1997.

It is not expected that there will be significant amounts of new commercial and industrial development in Poway. There are some parcels remaining for development in the Business Park, but it has largely reached its maximum capacity. New commercial and industrial development is expected to be conversions of existing parcels and infill development.

2.6 SERVICE AREA CLIMATE

(Legislative Requirement 9)

Poway's climate is typical of a Southern California coastal valley. Located approximately 10 miles from the Pacific Ocean, Poway enjoys mild-to-moderate temperatures, marine breezes, and low humidity. The average temperature is 72 degrees, and the average annual rainfall is 9 to 14 inches. However, in 1998 and 2004, rainfall exceeded 24 inches due to heavy winter storms. Rainfall in recent years (as recorded at Lake Poway) was as follows:

Figure 1 - Poway Rainfall in Recent Years

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Total Rainfall (inches)	9.79	6.86	13.03	11.4	13.76

Variations in weather affect short-term water consumption and sales. Poway's Water Treatment Plant, reservoirs, distribution, and billing system are all designed to accommodate variations in weather-related demand.

**Figure 2 - 2010 Climate Data for Poway Area
Evapotranspiration (ET_o), Rainfall (inches), and Temperature**

	Jan	Feb	Mar	Apr	May	Jun
Standard Average ET_o	2.81	2.76	3.78	5.31	6.1	6.97
Average Rainfall	3.18	3.64	3	1.2	0.27	0.14
Average Temperature	68.9	69.2	70.4	74.5	76.7	82.4

	July	Aug	Sep	Oct	Nov	Dec	Annual
Standard Average ET_o	7.08	6.83	5.67	4.15	3.31	2.56	57.33"
Average Rainfall	0.07	0.03	0.22	0.67	1.31	1.75	15.48"
Average Temperature	87.3	88.7	86.6	80.2	73.5	69	77.28°

Source: San Pasqual Valley CIMIS Station

3.1 INTRODUCTION

This section provides a description of Poway’s water demands, baseline and target uses, and the City’s water use reduction plan, along with supporting data tables.

3.2 WATER DEMANDS *(Legislative Requirements 25 and 34)*

3.2.1 Current Water Use

Current water usage in the City of Poway includes primarily domestic use (serving residential and commercial users), with a small amount of agricultural irrigation. Water consumption data for the City is separated into the following sectors: single-family residential; multi-family residential; commercial/institutional (including some governmental); industrial; landscape irrigation; other; and agricultural (commercial agricultural irrigation). Tables 3 and 4 provide data on number of accounts and water use for each sector in the City for 2005 and 2010. The source for this data was the “Public Water System Statistics” reports submitted by the City of Poway annually to DWR.

Tables 3 and 4 – Actual Water Deliveries – 2005 and 2010

Water Use Sectors	2005		2010	
	Number of Accounts	Deliveries (AF/Year)	Number of Accounts	Deliveries (AF/Year)
Single-family	12,567	9,538	12,516	6,586
Multi-family	147	667	145	452
Commercial	505	1,031	745	1,076
Industrial	49	138	49	113
Institutional/ Government ¹	0	0	0	0
Landscape	352	1,311	242	909
Agriculture	13	28	17	37
Other	365	746	32	243
Total	13,998	13,459	13,746	9,416

¹ “Institutional/Government” water use is included as part of the commercial category.

3.2.2 Major Water Use Sectors

The largest volume of the City's water use is the residential sector. This sector is comprised mainly of single-family detached and attached residences and multiple dwelling units, such as apartments and condominiums. The residential demand, combining single- and multi-family housing, accounted for 76 and 75 percent of the total water consumption in 2005 and 2010.

The landscape sector has the next highest volume of water use, with 9.7 percent of total water consumption in both 2005 and 2010. This sector includes dedicated irrigation accounts for commercial, multi-family, industrial, and institutional parcels; City parks; and City-administered landscape maintenance assessment districts. The landscape sector also includes raw water used to irrigate two commercial golf courses.

The commercial sector (which includes institutional water use for government and special district facilities, such as schools, churches, and the hospital) accounted for 7.7 percent of total water use in 2005 and 11.4 percent in 2010. Industrial water use represented one percent of total water use in both 2005 and 2010.

Water use in the agricultural sector, used for commercial agricultural irrigation, was less than 0.5 percent in both 2005 and 2010.

The City of Poway purchases recycled water from the City of San Diego for distribution within most of Poway Business Park for landscape irrigation. In 2010, the City distributed 499 AF of recycled water in this area according to recycled water data provided by the City of Poway Public Works Department. The plan for additional recycled water use is discussed in Section 3.5 - Water Use Reduction Plan.

3.2.3 Water Loss

The City diligently monitors and controls water system losses. The City tracks "authorized unmetered" uses, such as firefighter training and firefighting; water, sewer, and stormwater system maintenance; recycled system makeup water; and water quality and other testing. The City also tracks "metered" flows for water quality maintenance and analysis, and the testing and disinfection associated with the installation of new water mains. To calculate "non-revenue" water, the City compares the quantity of water delivered to the system from the Water Treatment Plant clearwell to the volume of water sold to customers. Authorized unmetered flows (e.g., water for firefighting training and system flushing) and unmetered flows (e.g., main leaks/breaks) are subtracted from this non-revenue water to calculate unaccounted for water, or water loss. Over the last 10 years and last three years, estimated water loss as potential system leakage was 3.63 and 3.33 percent, which is considered very good in the water industry. For calculating gross water use, a total water loss of 4.09 percent (excluding raw water for golf course irrigation) was used prior to 1998, and 5.51 percent was used after 1998 (when the recycled water system was implemented because water used to flush the potable system is sometimes captured for reuse through the recycled system rather than being diverted to the storm drain system.)

Figure 3 – System Water Loss Data (AF)

	2005	2010	2015	2020	2025	2030	2035
System Water Loss	713	497	690	714	736	765	772

3.3 **BASELINES AND TARGETS** *(Legislative Requirement 1)*

The City of Poway calculated its baseline and target water use following the February 2011 “Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use” provided by DWR. The base period ranges are shown in *Table 13 – Base Period Ranges* (Appendix B). Base daily per capita water use is shown in Tables 14 and 15 of Appendix B. The City of Poway’s baseline is estimated to be 269 gallons per capita per day (GPCD) based on the selected period of 1999 through 2008.

Tables 14 and 15 – Base Daily Per Capita Water Use

Base Period Year		Distribution System Population	Daily System Gross Water Use (MGD)	Annual Daily Per Capita Water Use (GPCD)
Sequence Year	Calendar Year			
Year 1	1999	47,321	12.8	271
Year 2	2000	47,796	13.9	290
Year 3	2001	48,758	12.5	256
Year 4	2002	49,476	13.6	275
Year 5	2003	49,858	12.9	258
Year 6	2004	50,186	13.8	275
Year 7	2005	50,250	12.7	252
Year 8	2006	50,257	14.2	282
Year 9	2007	50,440	14.0	278
Year 10	2008	50,649	12.6	249
10-Year Average GPCD				269
	2009	51,062	10.4	204
	2010	51,789	8.9	171

Agencies are able to choose from one of four methodologies for calculating a 2020 target. For the City of Poway, Method 1 provides the most reasonable, streamlined approach. **Based on Method 1, the City’s targets are 242 GPCD for 2015 and 215 GPCD for 2020.**

The Water Code requires water suppliers to confirm the 2020 target meets a minimum reduction established by statute. This is confirmed by comparing the 2020 water use target to a five-year base daily per capita water use value. As required by the Water Code, this exercise was completed and the computed five-year averages were all greater than 215 GPCD.

The Water Code also allows agencies to form regional partnerships to achieve 2020 targets. At this time, the City does not plan to join a regional alliance, however this may be an option to further evaluate in future years.

The population data for Method 1 was prepared by SANDAG. There is a small area in East Poway that is not served by the water system, so this population was estimated and subtracted from SANDAG's population estimates for the City. Gross annual water use (estimated at 9,810 AF in 2010) is the raw water purchased from SDCWA and treated at the City's Lester J. Berglund Water Treatment Plant, as well as raw water distributed to two golf courses. Occasionally, the City transfers water to SDCWA during short-term scheduled and unscheduled shutdown of their treated water supplies. This water was subtracted from City of Poway water use.

All of Poway's connections to SDCWA's First San Diego Aqueduct are metered. In addition, the City meters the water flowing into and out of the Lester J. Berglund Water Treatment Plant. The City and SDCWA have coordinated and agreed upon these gross annual water use figures for both the City's and SDCWA's UWMP. The City of Poway's data is based upon the Public Water System Statistics reports provided to DWR each calendar year. This data varies slightly from SDCWA's water use data due to differences in timing (fiscal and calendar year reporting periods), metered water sales versus amount of water placed into the distribution system, and fluctuations based on storage that may be in the system at any time.

3.3.1 Potable and Recycled Water Demand Projections *(Legislative Requirement 33)*

The City of Poway is largely built-out. Significant amounts of new development are not anticipated. In general, some additional residential development is expected (single-family and multi-family). There will also be some additional development of the remaining vacant parcels in the Poway Business Park (approximately 2.7 million square feet between 2011 and 2035). Other development that might occur would likely be reuse of existing commercial properties along the Poway Road corridor; this type of development is not expected to generate new water demand.

Tables 5 through 7 show projected water deliveries for Poway for 2015 through 2035. The projections were developed by applying the 2020 target of 215 GPCD to the projected population served, allowing for a percentage of water loss based on historical averages.

Historically, the primary category of water use in Poway is residential use, which is expected to continue. Water use projections out to 2035 for the residential sector were developed based on projected single-family and multi-family housing unit growth, as provided by SANDAG. The division of water between other use sectors was calculated proportionally to the ratio in 2009, with some additional growth allowed for the commercial and industrial sectors based on expected growth in the Poway Business Park. The number of accounts and volume of water for future years was estimated using growth rates appropriate for each sector based on projected growth.

Tables 5, 6, and 7 – Projected Water Deliveries

	2015		2020		2025		2030		2035	
Water Use Sectors	Number of Accounts	Deliveries AF/YR	Number of Accounts	Deliveries AF/YR	Number of Accounts	Deliveries AF/YR	Number of Accounts	Deliveries AF/YR	Number of Accounts	Deliveries AF/YR
Single-Family	12,736	8,232	13,095	8,535	13,452	8,862	13,978	9,326	13,978	9,405
Multi-Family	149	513	156	540	159	550	159	550	159	549
Commercial	778	1,123	797	1,151	805	1,162	810	1,170	815	1,177
Industrial	64	149	72	166	74	171	75	173	76	174
Institutional/ Government	0	0	0	0	0	0	0	0	0	0
Landscape	243	1,089	244	1,095	246	1,100	247	1,106	248	1,111
Agriculture	17	37	17	37	17	37	17	37	17	37
Other	34	694	35	715	36	737	37	759	38	782
Total	14,021	11,837	14,416	12,239	14,789	12,619	15,323	13,121	15,331	13,235

The Water Code requires water agencies to include in UWMPs projected water demand for planned affordable housing. The City has several affordable housing developments planned over the next 15 years that are included in the City's General Plan Housing Element, adopted in 2008. Projected cumulative water use for these developments is shown in Table 8, based on historical water used by similar existing affordable housing developments. Water use for projected affordable housing developments is accounted for within the single-family and multi-family water use projections.

Table 8 – Affordable Housing Projected Water Demands (AF)

Affordable Housing Water Demands	2015	2020	2025	2030	2035
Single-Family Residential (Cumulative New)	0	7.8	11.3	0	0
Multi-Family Residential (Cumulative New)	26.7	40.4	91.3	0	0
Total	26.7	48.2	102.6	0	0

As mentioned above, the City occasionally transfers water to SDCWA during shutdowns of their aqueducts to meet short-term scheduled and unscheduled shutdowns of their treated water supplies. The City’s future water use projections include continuing to provide a small amount of water for this purpose, approximately 200 AF per year, as shown in *Table 9 – Sales to Other Water Agencies* (Appendix B).

Table 10 – Additional Water Uses and Losses shows projected recycled water uses to serve existing customers and system losses. *Table 11 – Total Water Use* sums total water deliveries, sales to other agencies, recycled water use, and system losses to calculate the City’s projected total water use. *Table 12 – Retail Agency Demand Projections Provided to Wholesale Suppliers* shows Poway’s demand projections provided to SDCWA, the City’s wholesale water supplier. A summary of data from Tables 10, 11, and 12 is provided below in Figure 4. Tables 10, 11, and 12 are in Appendix B.

Figure 4 - Projected Water Use (AF)

	2015	2020	2025	2030	2035
Total Water Deliveries	11,837	12,239	12,619	13,121	13,235
System Losses	690	714	736	765	772
Total Demand Projections Reported to SDCWA	12,527	12,953	13,355	13,886	14,007
Sales to Other Water Agencies	200	200	200	200	200
Total Recycled Demand from City of San Diego	550	550	650	650	650

The projected residential, commercial, and industrial deliveries are technically and economically feasible. Section 4 of this plan discusses the City’s projected supplies.

3.4 PROJECTED DRY YEAR WATER DEMANDS *(Legislative Requirements 22)*

Water use changes during dry years. This section documents expected changes to overall water demand (assuming increasing demand due to increased irrigation needs) assessing historical dry years and the impact on demand in those years.

Since the City of Poway purchases nearly its entire potable water supply from SDCWA, Poway’s analysis of dry year water demands is based on SDCWA’s model.

3.4.1 Single Dry Year Demand

SDCWA investigated historic high temperature and low rainfall weather patterns and selected 1989 as a representative single dry year. Monthly weather patterns for 1989 were entered into SDCWA’s computerized demand estimating model and results are shown below. Since Poway’s climate is typical of SDCWA’s service area, this analysis was adopted for the City of Poway. The computation of Poway’s single dry year demand is also shown in Figure 5. This information is also reflected in *Table 33 – Supply and Demand Comparison – Single Dry Year* (Appendix B).

Figure 5 – Single Dry Year Demand Forecast (AF)

Single Dry Year Demand	2015	2020	2025	2030	2035
SDCWA					
Single Dry Year Demand with Conservation (Table 2-7 – SDCWA 2010 UWMP)	686,445	717,433	763,763	803,016	838,153
SDCWA					
Normal Demand SBX7-7 Demand Target (Table 2-6 – SDCWA 2010 UWMP)	635,622	639,949	671,949	702,673	730,256
Percent Dry Year Above Normal	8.00%	12.11%	13.66%	14.27%	14.78%
City of Poway - SBX7-7 Demand Target	12,527	12,953	13,355	13,886	14,007
City of Poway - Single Dry Year (Same percent above normal as SDCWA)	13,529	14,521	15,180	15,869	16,077

3.4.2 Multiple Dry Year Demands

SDCWA utilized a statistical approach to correlate trends in historical deliveries with multi-year trends observed in precipitation to construct a set of consecutive dry year impact factors. Historical mean weather data was then evaluated to select the conditions of the driest consecutive two- and three-year periods over the last several decades. Combining the impact factors and weather patterns, the projections shown in *Table 34 – Supply and Demand Comparison – Multiple Dry Year Events* (Appendix B) were developed for the City of Poway. Figure 6 below outlines the calculations used to prepare Table 34.

Figure 6 - Multiple Dry Year Demand Forecasts (AF)

Multiple Dry Year Demands	2016	2017	2018
SDCWA			
Total Estimated Demands (Table 2-8 – SDCWA 2010 UWMP)	681,272	704,398	739,252
SDCWA			
Normal Demand SBX7-7 Demand Target (Interpolated from Table 2-6 – SDCWA 2010 UWMP)	636,487	637,353	638,218
Percent Multiple Dry Year Above Normal	7.04%	10.52%	15.83%
City of Poway – Normal Year	12,612	12,698	12,783
City of Poway – Multiple Dry Year (Same Percent above normal as SDCWA)	13,499	14,034	14,807

Multiple Dry Year Demands	2021	2022	2023
SDCWA Total Estimated Demands (Table 2-8 – SDCWA 2010 UWMP)	723,243	750,714	789,043
SDCWA Normal Demand SBX7-7 Demand Target (Interpolated from Table 2-6 – SDCWA 2010 UWMP)	646,349	652,749	659,149
Percent Multiple Dry Year Above Normal	11.9%	15.01%	19.71%
City of Poway – Normal Year	13,034	13,114	13,194
City of Poway – Multiple Dry Year (Same Percent above normal as SDCWA)	14,585	15,082	15,794

Multiple Dry Year Demands	2026	2027	2028
SDCWA Total Estimated Demands (Table 2-8 – SDCWA 2010 UWMP)	771,896	800,620	843,062
SDCWA Normal Demand SBX7-7 Demand Target (Interpolated from Table 2-6 – SDCWA 2010 UWMP)	678,112	684,275	690,437
Percent Multiple Dry Year Above Normal	13.83%	17%	22.11%
City of Poway – Normal Year	13,461	13,567	13,673
City of Poway – Multiple Dry Year (Same Percent above normal as SDCWA)	15,323	15,874	16,695

Multiple Dry Year Demands	2031	2032	2033
SDCWA Total Estimated Demands (Table 2-8 – SDCWA 2010 UWMP)	810,482	841,975	881,781
SDCWA Normal Demand SBX7-7 Demand Target (Interpolated from Table 2-6 – SDCWA 2010 UWMP)	708,262	713,760	719,259
Percent Multiple Dry Year Above Normal	14.43%	17.96%	22.6%
City of Poway – Normal Year	13,910	13,934	13,958
City of Poway – Multiple Dry Year (Same Percent above normal as SDCWA)	15,918	16,437	17,112

In Fall 2007, Poway increased efforts to promote water efficiency in response to the water supply challenge facing Southern California. Efforts were tailored to meet the needs of Poway's water customers intended to create long-term sustainable change in the way residents and businesses think about and use a limited water supply. These efforts evolved into a five-pillar approach that included: extensive public education, rebate programs to assist customers in purchasing water-efficient plumbing devices, a pricing structure to encourage conservation, conservation efforts at City-owned properties, and water waste prohibitions. In combination, these efforts yielded significant water savings.

In January 2008, the City of Poway implemented a Level 1 – Water Shortage “Watch” Condition, aimed to achieve voluntary conservation up to ten percent. Facing a mandatory water reduction of approximately eight percent from SDCWA, effective July 1, 2009, the City implemented Level 2 - Water Shortage “Alert” Condition. As part of this transition to Level 2, mandatory water restrictions took effect, including significant restrictions on outdoor irrigation.

In response to all of these efforts working in combination, Poway residents and businesses significantly reduced water use, both indoors and outdoors. Changing landscape practices and an overall decline of peak water sales are indicative of outdoor water conservation.

Between 2006 and 2010, Poway's total water use decreased by 38 percent. For 2010, Poway's per capita water use was 171 GPCD, as opposed to 282 GPCD in 2006 and the 2020 target of 215 GPCD.

If maintained, the water efficiency achieved by Poway's water customers positions the City well for future water challenges. The City's programs and actions to encourage water efficiency occurred simultaneously with a struggling economy, rapidly increasing water rates, and short-term cooler and wetter weather patterns. In recent months, the City of Poway has scaled back some of its water efficiency efforts. For example, public education efforts have been reduced, wholesale supplier rebate programs are less available, and irrigation restrictions were discontinued on May 17, 2011.

The City anticipates there will be some increase in water use. However, some of the achieved water savings will be long-lasting, such as savings from retrofitting landscaping and conversion to water-efficient appliances. Although the City of Poway is currently below its 2015 and 2020 water use targets, the City will need to closely monitor water use patterns in the next few years and be prepared to expand water use efficiency programs if necessary.

The City of Poway foresees leveraging resources by utilizing programs available through MWD and SDCWA. MWD is currently preparing its Long-Term Water Conservation Plan, which includes a focus on “water-efficiency through market transformation.” If successful, Poway expects to realize some direct water savings locally as a result. The future of financial incentives for water-efficient devices remains uncertain; if such programs are available through SDCWA and/or MWD, the City of Poway will promote them locally to residents and businesses.

Should the City find that water use patterns begin to trend upward, below are some strategies the City of Poway could consider to reduce water use as necessary:

- ***Single-Family Residential***

About 67 percent of gross water is used by single-family residential customers. Proportionally, savings achieved in this sector have a greater impact than any other category. Specific strategies to promote conservation in this area include: water rates that incentivize efficient water use, public education focused on long-term landscape water-efficiency, and resources to help customers improve the long-term water efficiency of their landscaping.

- ***Landscaping***

About 50 percent of water use in Poway is for outdoor irrigation. Water meters dedicated to irrigation represent about 10 percent of water accounts; however, other water account types also include irrigation (especially single-family residential). Specific strategies to achieve landscape water efficiency include: landscape irrigation system and plant retrofits; extension of the recycled water system and conversion of existing potable water accounts to recycled water for landscape; and pursuit of grant funding for these types of conversion projects for City-owned facilities, parks, and landscape maintenance districts.

- ***Commercial and Industrial***

The commercial sector (at 11 percent) is another area for exploration. For example, the City can aim to decrease restaurant water use through public education and assisting with plumbing and appliance retrofits.

Even though industrial sector water use represents only about one percent of Poway's water use, it could still be a reasonable area to explore further opportunities for promoting water efficiency. For example, the City could seek opportunities to partner with companies in the Poway Business Park. New technological advancements in recent years targeted toward this area promote a more significant return on investment that might make these water efficiency projects more achievable for the business community.

Another approach with commercial and industrial customers might be an economic development strategy to help businesses understand the costs for water, sewer, and energy. Finding ways to reduce these costs will help the businesses' bottom-line.

With new and retrofitted industries, the City could explore encouraging industry-specific water-efficiency practices and technologies.

- ***Development Standards***

As part of "green building," Poway's development standards could be evaluated to encourage further water-efficiency in new development, including landscaping; plumbing fixtures; use of gray water, rain barrels, and cisterns; cooling tower blow-down water reuse for irrigation; dual-plumbing; and use of recycled water for interior dual-plumbing of commercial buildings. The City has standards to promote water-efficient development with many future opportunities due to numerous emerging hardware and design advancements.

Another strategy could be to expand “low impact” development design. Low impact development might include more encouragement of the use of pervious hardscape. The City might also explore cisterns, underground storage basins, water-saving street designs, and improving undeveloped areas to allow infiltration of stormwater.

- ***Pricing Structure***

Indications from the City’s wholesale water suppliers are that prices are expected to continue to rise for the next decade. Increased rates are expected to significantly deter customers from increasing water use. Should water use begin to trend upward again, the City of Poway could explore pricing structures that might further promote maximizing efficient water use.

- ***Expansion of Recycled Water***

Other possibilities to explore are opportunities for expanding recycled water, either directly (such as in northern areas of Poway or expansion of the recycled water infrastructure from the Business Park into central Poway along Community Road to serve the Civic Center, Community Park, and other irrigation meters in the vicinity) or indirectly (such as the possibility of a creative partnership with the City of San Diego to purchase credits from their advanced water purification project). There is additional discussion of recycled water expansion in Section 4.5.

This section identifies existing and planned water supply sources for the City of Poway, including current and planned quantities.

4.1 WATER SOURCES *(Legislative Requirement 13)*

Poway imports about 100 percent of its water supply. The City's main water supply is raw water purchased from SDCWA, which is treated at the Lester J. Berglund Water Treatment Plant for distribution in the City's potable water system. Lake Poway captures a small amount of rain and surface runoff during rain events. Since this quantity of Lake Poway runoff is relatively minimal and not reliable (as well as off-set by naturally-occurring evaporation and seepage), it is not considered as a planned water supply source. Additionally, the City of Poway purchases a small quantity of recycled water from the City of San Diego for irrigation in the Poway Business Park.

SDCWA's 2010 UWMP indicates there will be adequate water supplies to meet demand in the SDCWA service area through 2035 during normal water years and single dry years. During the last year of a multiple dry year scenario, management actions may be needed to manage demand within available supplies. SDCWA is also pursuing development of potential additional supplies including seawater desalination, construction of storage facilities, and acquiring out-of-region supplies. The status of these alternative sources is detailed in SDCWA's 2010 UWMP.

4.1.1 San Diego County Water Authority and Metropolitan Water District

SDCWA's 2010 UWMP reports it will have enough raw water to meet the projected needs of its member agencies. SDCWA is supplied by MWD but also obtains water from conserved agricultural irrigation and canal lining in the Imperial Valley of California. MWD's supplies are primarily the State Water Project and the Colorado River. SDCWA is currently negotiating with Poseidon Resources regarding the supply from the Carlsbad Seawater Desalination Project. MWD and other State and Federal Water Project Contractors are considering programs to restore reliability of the State Water Project (Bay-Delta) supply and improve the ecosystem. These are major water supply projects that are underway by these wholesale agencies. More information on the sources, new supply projects, and their reliability can be found in SDCWA's and MWD's 2010 UWMPs.

4.1.2 Current and Projected Supplies

The City of Poway's projected demands were described in Section 3 and are shown in *Table 16 – Water Supplies – Current and Projected*.

SDCWA projections indicate the ability to continue to supply 100 percent of Poway's raw water needs. Projected recycled water demands are estimated to be 550 AF per year until 2020, growing to 650 AF by 2025. Unless the City expands its recycled water distribution system, demands are not projected to grow significantly.

To date, it has not made economic sense for Poway to develop its own supply projects for potable or recycled water. Poway's long-term plan includes the possibility of constructing a treated water connection from a SDCWA potable water line to a Poway distribution line to be available in case of emergency. Additionally, as part of the City's upcoming Sewer Master Plan, there will be an evaluation of possible opportunities and economic feasibility of developing additional sources of reclaimed water to create a local recycled water supply for irrigation.

Table 16 Water Supplies - Current and Projected (AF)

Water Supply Sources	2010	2015	2020	2025	2030	2035
Wholesale Raw Water¹ SDCWA	9,913	12,727	13,153	13,555	14,086	14,207
Recycled Water Purchased from City of San Diego for Irrigation in Poway Business Park	251	550	550	650	650	650
TOTAL	10,164	13,277	13,703	14,205	14,736	14,857

¹ For 2015 through 2035, figures include 200 AF/YR for sales to SDCWA for aqueduct shutdowns.

4.1.3 Storage Reservoirs and Lake Poway

The City of Poway has 18 storage reservoirs ranging in size from 500,000 gallons to 10 million gallons. Lake Poway is the City's largest reservoir. It was originally built by the Poway Municipal Water District in 1971-1972 and serves the City of Poway as a raw water storage reservoir and regional park and recreation facility. It has a 160-foot high earthen dam that contains 3,400 AF of water in 60 surface acres. The Lake is normally maintained at an elevation of 936 feet, two feet below the spillway. The Lake level fluctuates at the 936-foot elevation throughout the year except during summer months when it is drawn down for operational reasons. It is estimated that depending on the volume of water in the Lake, the season, and conservation levels, the Lake would have adequate water supplies for three to six months.

4.1.4 Lester J. Berglund Water Treatment Plant

The City operates the Lester J. Berglund Water Treatment Plant, a conventional water filtration plant, transmission and storage system infrastructure with a peak design capacity of 24 million gallons per day (MGD). The City has the capability to provide some treated water to SDCWA in the event of shutdowns of SDCWA's treated water aqueduct. The maximum amount of water that Poway could deliver to SDCWA would depend on Water Treatment Plant flow. In most cases, Poway would be able to deliver up to four MGD of treated water for a short time through an emergency use agreement with SDCWA.

The water delivered to Poway from SDCWA has historically been a blend of 60 percent Colorado River Aqueduct Water and 40 percent State Project Water. This blending of water dilutes the high salt concentration of the former and high nutrient content of the latter. Therefore, the City's mixed raw water quality is high. Once treated at the Lester J. Berglund Water Treatment Plant, the blended water substantially surpasses federal and state water quality standards.

Quagga Mussels are a challenge throughout the western United States. Some of MWD's and SDCWA's facilities have been impacted by Quagga Mussels, but with eradication and control strategies, there has been no reduction in deliveries. In May 2010, the City of Poway identified the presence of Quagga Mussels in Lake Poway. While Quagga Mussels do not negatively harm water quality like some contaminants, they are a highly-invasive species. Their presence requires careful attention, including ongoing testing procedures and implementation of eradication and control strategies, because they can be highly destructive to water system infrastructure. In the future, more significant operational adjustments to mitigate Quagga Mussels may be required.

The City has experienced water quality challenges due to low flow in water pipes and lack of "turnover" in storage reservoirs, both due to significantly reduced water use. City system operators have modified operations to maintain water quality. The City completed an initial distribution system evaluation with a calibrated hydraulic model to gain further insight into possible problems and develop solutions. *Table 30 – Water Quality – Current and Projected Water Supply Impacts* in Appendix B shows no anticipated reductions in supply due to water quality.

Due to Poway's varied topography, distribution service zones range in elevation between 420 feet and 1,420 feet above sea level. This elevation range requires pumping and pressure regulating zones to provide average service pressures of approximately 80 pounds per square inch. There are eighteen pressure zones and about 267 miles of water mains (greater than four-inch diameter) and distribution pipelines serving approximately 13,746 services. All water services are metered.

4.1.5 Surface Water and Watersheds

The City's Lake Poway surface storage reservoir is used to store raw water, buffer peak seasonal demands, and is available as an emergency water supply. The Lake's ecologic conditions are monitored daily by Water Treatment Plant staff to assure maximum water quality.

Poway lies amidst a regional drainage system of westward-tending streams, which convey surface water toward the Pacific Ocean. There are two major watersheds in Poway. Surface water flows into the San Dieguito River and Lake Hodges from the northern portion of Poway, while water from the southern areas of the city flows into Los Peñasquitos Creek. These channels not only carry floodwaters, but also serve as natural recreational and open space linkages within the community.

Minimal surface run-off occurs in the 1,200-acre watershed upstream of Lake Poway. The City of San Diego has water rights in this watershed. By agreement, 50 percent of seasonal stream flow into Lake Poway must be passed on to the City of San Diego unless San Diego's Lake Hodges spills.

Poway has an arid climate with average annual rainfall of approximately 13 inches. Runoff is intermittent, ranging from several years of little or no runoff to flooding during major storm events. With this type of rainfall/runoff pattern, development of surface water supplies is generally not cost effective. Dams are very expensive, it is difficult to obtain environmental permitting, infrastructure to convey the water to the treatment plant is expensive, and the annual yield is low. In addition, historic water rights agreements award rights to most of the larger watersheds in the vicinity of Poway to the City of San Diego making it difficult to secure water rights. A further impediment to surface water development is the need to maintain low flows for riparian biological communities.

4.1.6 Water Service Administration

The City of Poway Public Works Department is responsible for the operation and maintenance of all water supply and distribution facilities. It also administers the water conservation program. The Development Services Department provides assistance with the design and inspection of major capital improvement projects. The entire distribution system is metered. The Administrative Services Department bills customers bi-monthly at the commodity rates shown below, which took effect in January 2011. The single-family rates include two blocks to encourage conservation. Other categories have a uniform rate structure, including recycled water that is used for landscape irrigation in the Poway Business Park.

Figure 7 - City of Poway Water Rate Structure (Variable Portion Only)

Customer Category	Block	Volume (1 unit = 100 cubic-feet)	Rate
Single-Family	Block 1	1 to 199 units	\$3.83 per unit
	Block 2	200 units and above	\$5.46 per unit
All Other Customer Types	Not Applicable	Not Applicable	\$3.90 per unit
Recycled	Not Applicable	Not Applicable	\$3.51 per unit

The Poway General Plan discusses the City's policy on the active conservation of water resources in the community. The policy states that water resources in the City should be managed through: retention of the natural drainage systems, protection of limited groundwater resources, promotion of domestic water conservation measures, development of a reclaimed water supply and distribution system, and preservation of water quality at or better than acceptable public health standards. The General Plan and its final Environmental Impact Report contains implementation strategies and mitigation measures that focus on water conservation and recycling. The City has incorporated water conservation and reclamation measures into the development application review process. The City also closely examines the impact of land use changes on its ability to maintain its present quality of water supply and service to the community.

4.1.7 Capital Improvement Program

The City of Poway has an ongoing capital improvement program to improve and maintain its water infrastructure. Water system improvements are based on the Water System Master Plan and projects identified by staff working in the field. The following is a summary of key projects from 2005 to 2010:

- 42-Inch Espola Road Pipeline to convey water from the Water Treatment Plant to southern areas of the City of Poway;
- High Valley Pump Station to replace an aging station and improve supply and reliability;
- High Valley Pipeline to improve supply and reliability; and
- Rehabilitation of Boca Raton and Skyridge reservoirs to improve reliability and water quality.

4.2 GROUNDWATER

(Legislative Requirement 14)

The geology of Poway does not include any large alluvial aquifers with the coarse-grained materials that support efficient groundwater extraction and recharge. Poway's aquifers are small, located along creeks and streams, and contain more fine-grained materials. Groundwater is also available in fractured bedrock, although it is difficult to locate and normally requires deep wells.

For these reasons, groundwater is not a significant supply for Poway, and it is not used in the community water treatment and distribution system. Private wells are privately constructed and not subject to monitoring by the City. They are used for potable supply in some areas that are not served by the community water system and in other areas as a secondary source for domestic use and landscape/crop irrigation. The absence of a community water distribution infrastructure in the undeveloped areas, together with minimal groundwater supply, prevents dense development in that area. The City closely monitors and regulates all land use applications in these areas, but is not required to monitor the volume of water pumped. Therefore, no data is provided for *Table 18 – Groundwater – Volume Pumped* and *Table 19 – Groundwater – Volume Projected to be Pumped*.

Table 18 – Groundwater – Volume Pumped (AF)

Basin Name(s)	Metered or Unmetered	2015	2020	2025	2030	2035
None	Not Applicable	0	0	0	0	0
Total Groundwater Pumped		0	0	0	0	0
Groundwater as Percent of Total Water Supply		0%	0%	0%	0%	0%

Table 19 – Groundwater – Volume Projected to be Pumped (AF)

Basin Name(s)	2015	2020	2025	2030	2035
None	0	0	0	0	0
Total Groundwater Pumped	0	0	0	0	0
Percent of Total Water Supply	0%	0%	0%	0%	0%

4.3 **TRANSFER OPPORTUNITIES**

(Legislative Requirement 24)

The City of Poway does not have its own water resources, and therefore, does not have (or project to have) transfers or exchanges with neighboring agencies. Therefore, no data is provided for *Table 20 – Transfer and Exchange Opportunities*.

Table 20 – Transfer and Exchange Opportunities

Transfer Agency	Transfer or Exchange	Short-Term or Long-Term	Proposed Volume
None	0	0	0
Total	0	0	0

4.4 **DESALINATED WATER OPPORTUNITIES**

(Legislative Requirement 31)

Poway is about 14 miles inland from the Pacific Ocean and therefore a Poway-led ocean desalination project is not feasible. At one time, Poseidon Resources contracted with nine water agencies, north and west of Poway, to purchase water from its Carlsbad Desalinated Seawater Project. This might have been an opportunity for Poway, by wheeling water through other agencies, or through transfers or exchanges, but the supply was fully subscribed by the nine agencies. SDCWA projects desalinated seawater as a significant portion of its future water supply portfolio. They are currently negotiating with Poseidon to purchase the entire supply for the region. In addition, SDCWA is working to develop another desalinated seawater supply at Marine Corps Base Camp Pendleton, just north of Oceanside. Otay Water District, an SDCWA member agency, is working to develop another desalinated seawater supply in Rosarito Beach, Baja California, Mexico.

4.5 **RECYCLED WATER OPPORTUNITIES**

(Legislative Requirements 44, 45, 46, 47, 48, 49, and 50)

4.5.1 **Introduction**

Approximately five percent of total water use in Poway is recycled water for landscape irrigation in the Poway Business Park. This is the only recycled water used in the City of Poway. This subsection discusses the agencies Poway coordinates with for recycled water, wastewater collection and treatment, the existing recycled system, and recycled water expansion opportunities.

4.5.2 Coordination

Poway coordinated this Plan with the City of San Diego, its current supplier of recycled water. Potential sources of future recycled water for Poway include the cities of San Diego and Escondido and Rincon del Diablo Municipal Water District. Poway plans to explore opportunities for collaboration with these agencies on recycled water projects in northern areas of Poway as opportunities arise.

4.5.3 Wastewater Collection and Treatment Systems

Poway owns, operates, and maintains 175 miles of collection system piping and five sewage lift stations. The collection system piping is a combination of vitrified clay and plastic pipe. Each pump station is designed to lift sewage from a low-lying service area through a force main to a connection to the gravity system. The sewage lift stations are monitored by City staff 24-hours per day with a computer SCADA system to track flow, wet-well levels, and other data. In addition, the City maintains approximately 3,200 manholes.

Poway does not own or operate a wastewater treatment facility. Poway's wastewater is treated by agreement with the City of San Diego's Metropolitan Wastewater Department. Most of Poway's sewage leaves the City to the southwest in the Peñasquitos Trunk Sewer. The Peñasquitos Pump Station and Force Main deliver the flow to the City of San Diego's North City Wastewater Reclamation Facility. At the North City facility, flow that is not recycled is discharged to the City of San Diego's Point Loma Wastewater Treatment Plant. A small portion of Poway's sewage flows northwest into the City of San Diego sewers in Rancho Bernardo, and is then pumped to the City of Escondido's Hale Avenue Wastewater Reclamation Facility.

Poway's current agreement with the City of San Diego Metropolitan Wastewater Department allows 5.83 MGD of wastewater (6,530 AF/year) to be discharged into the City of San Diego's collection system. Poway's 2010 average annual flow of wastewater to the City of San Diego was approximately 3,500 AF and to Escondido was approximately 50 AF.

At both the San Diego and Escondido wastewater treatment facilities, a portion of Poway's sewage is treated to tertiary standards for recycling. At North City approximately 20 percent is recycled, while at Hale Avenue approximately 12 percent is recycled. Non-recycled water is discharged to the Pacific Ocean.

Table 21 - Recycled Water – Wastewater Collection and Treatment shows the wastewater collected in Poway, and the volume treated by San Diego and Escondido that meets recycled water standards.

Table 21 – Recycled Water – Wastewater Collection and Treatment (AF)

Type of Wastewater	2005	2010	2015	2020	2025	2030	2035
Wastewater Collected in Service Area	4,375	3,571	3,716	3,905	3,867	3,905	3,944
Wastewater Treated in Service Area	0	0	0	0	0	0	0
Volume that Meets Recycled Water Standard (City of San Diego -North City Plant)	865	705	734	771	764	771	779
Volume that Meets Recycled Water Standard (Escondido – Hale Plant)	13.4	13.4	13.4	13.4	13.4	13.4	13.4

Table 22 – Non-Recycled Wastewater Disposal shows the volume of wastewater that the cities of San Diego and Escondido treat on behalf of the City of Poway to secondary standards and discharge to the ocean (current and projected).

Table 22 – Non-Recycled Wastewater Disposal (AF)

Method of Disposal	Treatment Level	2010	2015	2020	2025	2030	2035
Ocean (City of San Diego – North City Plant)	Secondary	2,819	2,935	3,086	3,055	3,086	3,117
Ocean (City of Escondido – Hale Plant)	Secondary	34.7	34.7	34.7	34.7	34.7	34.7
Total		2,853	2,969	3,120	3,089	3,120	3,151

4.5.4 Existing Recycled Water Distribution System

Recycled water is currently used in the Poway Business Park for landscape irrigation, distributed through dedicated pipes and meters. The developers of the Business Park paid for the recycled water infrastructure at the time of construction, and the City maintains the system. The recycled water system began construction in the 1990s and the first recycled water was received in 1997.

Poway purchases its recycled water from the City of San Diego. The recycled water is produced at San Diego’s North City Wastewater Treatment Plant in the Miramar area and piped back to Poway.

The City’s 12-mile recycled water distribution system is heavily regulated and routinely inspected for excess runoff and other discrepancies to ensure that all sites adhere to all legal requirements, including Poway’s Rules and Regulations for Recycled Water Use adopted by the City Council on September 30, 1997. All irrigation in the Business Park is required to use recycled water, with the exception of a small portion of the Business Park not yet connected to the system.

The unit cost charged to customers for recycled water is 90 percent of the potable water rate. Starting in 2009, there was a decrease in recycled water use, attributable to the economy and outdoor watering restrictions (though the restrictions do not apply to recycled water customers). Poway estimates purchases will grow to approximately 650 AF per year over the next 25 years.

4.5.5 Recycled Water Opportunities

Poway completed recycled water master planning that included a market assessment of potential uses for recycled water in Poway. In general, areas of Poway not currently served with recycled water are a long distance from recycled water supplies and would require expensive infrastructure. Poway is largely “built-out” so the opportunity to require dual piping systems during development is limited. However, as supplies and infrastructure become available, the City will consider serving these markets. The City will continue to seek cost-effective recycled sources and conveyance for these markets. Potential opportunities to expand recycled water use include:

- ***Build-Out of the Poway Business Park*** – Within the Poway Business Park are remaining undeveloped parcels. These parcels are expected to develop within the next 15 years. Upon development, these sites will be connected to the recycled water system for landscape irrigation. Another possibility to explore in the Business Park, for both new development and retrofits of existing development, is use of recycled water for indoor purposes, such as process water, cooling systems, and dual-plumbing for toilet flushing. The City might also consider extending recycled water main lines to the remaining small developed area of the Business Park not currently connected to recycled water.
- ***Connection of Two Existing Golf Courses*** - There are two golf courses in the northern area of Poway, StoneRidge Country Club and Maderas Golf Club. However, there is no geographically feasible source of recycled water. In the upcoming Sewer Master Plan, Poway will explore opportunities and economic feasibility of developing additional local sources to create recycled water for irrigation. Another long-term option to explore is a partnership with the Rincon del Diablo Municipal Water District, which neighbors Poway to the north of San Pasqual Valley and provides recycled water in that vicinity.
- ***Extension from Business Park into Central Poway*** – An extension of the recycled water mainline from the Business Park north along Community Road down into the central area of Poway might provide an additional opportunity. Estimates show potentially 24 existing dedicated irrigation meters could be connected and converted to recycled water for a combined annual potable water savings of approximately 85 AF. This concept needs further study to better estimate construction costs, conversion costs, and water savings.

Poway is a stakeholder in the City of San Diego’s current recycled water study, as a wastewater treatment and recycled water customer. The draft study evaluated recycled water expansion opportunities for the Rancho Bernardo-area of San Diego, west of Poway, including a possible connection to Poway. However, this option was determined to be not cost effective due to the

high cost of conveyance infrastructure. It does not seem that San Diego will pursue development of that option. Another significant component of the City of San Diego's recycled water study is analysis of a large-scale indirect potable reuse project (advanced water purification). As the study continues, Poway will discuss and evaluate participation opportunities with the City of San Diego.

Table 23 – Recycled Water – Potential Future Use shows the potential future uses for recycled water in Poway. Currently, only the continuation of recycled water for irrigation in the Business Park is considered feasible. The remaining categories in Table 23 are technically feasible but not economically feasible. Landscape irrigation in the Community Park and Civic Center area, and industrial reuse in the Business Park are potentially economically feasible and Poway will continue to consider these opportunities. Other landscape irrigation is not currently economically feasible because of the cost to construct pipelines to serve relatively few users. There is almost no commercial agriculture remaining in Poway. There are no wildlife habitat, wetlands, groundwater recharge, seawater barrier, or geothermal/energy uses for recycled water.

Table 23 – Recycled Water Potential Future Use (AF)

User Type	Description	Feasibility	2015	2020	2025	2030	2035
Agricultural Irrigation		Not	0	0	0	0	0
Landscape Irrigation	Community Road/Civic Center	Potentially	85	85	85	85	85
Commercial Irrigation	Poway Business Park Expansion	Feasible	0	0	0	0	0
Golf Course Irrigation	StoneRidge and Maderas	Not	0	0	0	0	0
Wildlife Habitat		Not	0	0	0	0	0
Wetlands		Not	0	0	0	0	0
Industrial Reuse	Poway Business Park Expansion	Potentially	0	0	100	100	100
Groundwater Recharge		Not	0	0	0	0	0
Seawater Barrier		Not	0	0	0	0	0
Geothermal Energy		Not	0	0	0	0	0
Indirect Potable Reuse		Not	0	0	0	0	0
Total			85	85	185	185	185

Poway's 2005 UWMP did not project recycled water use for 2010. *Table 24 – Recycled Water – 2005 UWMP Use Projection Compared to 2010 Actual* shows actual 2010 recycled water use, with no values for 2005 projections for 2010.

Table 24 – Recycled Water – 2005 UWMP Use Projection Compared to 2010 Actual (AF)

User Type	2010 Actual Use	2005 Projection for 2010
Agricultural Irrigation	0	0
Landscape Irrigation	0	0
Commercial Irrigation ¹	499	0
Golf Course Irrigation	0	0
Wildlife Habitat	0	0
Wetlands	0	0
Industrial Reuse	0	0
Groundwater Recharge	0	0
Seawater Barrier	0	0
Geothermal Energy	0	0
Indirect Potable Reuse	0	0
Total	499	0

¹499 AF sold to Poway recycled water customers for irrigation in 2010. Poway purchased 251 AF of recycled water from the City of San Diego. The difference is non-potable and potable water added to recycled water distribution system as necessary for water quality and supply availability purposes.

Table 25 – Methods to Encourage Recycled Water Use lists ways Poway encourages use of recycled water. As a financial incentive, the City uses the regional model and sells recycled water at 90 percent of the potable water commodity rate. In addition, when the City is in a water shortage condition declared by the City Council, recycled water irrigation is exempt from mandatory watering restrictions. The City may also consider assisting customers with retrofit costs, which could be an incentive.

Table 25 – Methods to Encourage Recycled Water Use (AF)

Actions	Projected Results					
	2010	2015	2020	2025	2030	2035
Recycled Water Rate is 90 Percent of the Potable Water Rate	0	0	0	0	0	0
Exemption from Irrigation Watering Restrictions When in Effect	0	0	0	0	0	0
Potential Financial Assistance for On-Site Irrigation System Retrofit	0	0	0	0	0	0
Total	0	0	0	0	0	0

WATER SUPPLY RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING

5.1 INTRODUCTION

This section addresses water supply reliability, water supply contingency planning, water quality, and drought planning. As noted in Section 4, the City of Poway currently obtains all of its potable water supply from SDCWA. This is expected to continue in the future. Therefore, the City's water supply reliability is directly linked to SDCWA's water supply reliability.

Most of the information in this Section is based upon SDCWA's draft 2010 UWMP, dated May 2011. SDCWA obtains a large portion of its supply from MWD. SDCWA coordinated its demands and expected supplies with MWD. A full description is provided in SDCWA's 2010 UWMP.

5.2 WATER SUPPLY RELIABILITY *(Legislative Requirements 5 and 23)*

This section describes management tools and options to minimize imported water and increase reliability of SDCWA's supplies.

5.2.1 Maximizing Resources and Minimizing Need to Import Water from Other Regions

As described in Section 4, because of the semi-arid climate, location, local geology, and the water rights of other agencies, it has not been feasible or cost-effective for the City of Poway to develop local water resources, such as surface water, groundwater, or desalinated seawater. The City is open to evaluating opportunities for water supply diversification as they may arise. The City has a recycled water distribution system and will continue to consider expanding the system where cost-effective. Poway has participated in regional programs to encourage the installation of water-efficient toilets, showerheads, and clothes washers. In addition, the City has regulations that prohibit water waste.

5.2.2 San Diego County Water Authority Supplies

MWD, SDCWA, and some of SDCWA's member agencies have developed and continue to develop a variety of other water resources to provide a diverse water supply mix and increased supply reliability. Examples include:

- State Water Project;
- Colorado River;
- Desalinated seawater projects in California and Mexico;
- Local surface water;
- Local groundwater and groundwater recovery;
- Exchanges and transfers, including conserved irrigation water; and
- Recycled water.

SDCWA will monitor the reliability of existing sources and development progress of new sources to provide long-term reliability. SDCWA's UWMP states "...the) unavailability of any one supply source will be buffered because of the diversity of supplies: the region is not reliant on a single source." To replace or supplement an existing supply, SDCWA could implement transfers or additional seawater desalination, and member agencies could increase development of recycled water, groundwater, or seawater desalination.

To develop a reliable estimate of supplies, SDCWA divided planned projects into "verifiable" and "planned" categories. A "verifiable" supply has achieved a level of certainty where the California Environmental Quality Act (CEQA) has been satisfied, permits are in hand, or contracts have been executed. "Planned" supplies are not as certain, but have progressed to a point where significant financial actions have been taken to pursue the project. Within the seawater desalination category for example, the Carlsbad Poseidon Project is considered "verifiable," while the Otay Water District Bi-National Seawater Desalination Project and the Camp Pendleton Project are categorized as "planned."

While all of SDCWA's sources are potentially subject to limitations for various reasons, no specific quantifiable limitations are currently in place. In addition, SDCWA's supplies are buffered because of diversity and non-reliance on a single source. Therefore, no quantities have been included in *Table 29 – Factors Resulting in Inconsistency of Supply* (Appendix B). SDCWA's plan includes a comprehensive discussion of reliability issues, environmental considerations, and water quality considerations. Therefore, they are mostly not repeated herein. Two examples are listed below:

- **MWD's Colorado River Supply** – Prior to 2003, MWD's typical deliveries from the Colorado River were 1.2 million AF (MAF) because MWD had access to large volumes of water that was unused by other states. In 2003, as a result of the U.S. Supreme Court Decision in *Arizona vs. California*, their firm annual supply was set at 550 thousand AF (TAF). Since 2003, MWD has developed a variety of programs to provide a maximum Colorado River supply capability of 950 TAF during average, single, and multiple dry years through 2035. Current programs include agricultural water conservation, agricultural land management, Lake Mead storage, Colorado River flow balancing facilities, and transfer agreements with the Southern Nevada Water Authority. Future programs under development include agricultural crop stressing and land fallowing, transfer agreements with the Central Arizona Water Conservancy District and the Coachella Valley Water District, and groundwater banking along the Colorado River Aqueduct.

- **MWD's State Water Project Supplies** – While MWD is entitled to about 1.9 MAF, actual deliveries are considerably less due to the level of State Water Project Development, pumping restrictions due to state and federal environmental regulations, and annual hydrologic conditions. Similar to the Colorado River, MWD has developed/participated in a number of programs to improve supply reliability, the most notable of which is the Bay Delta Conservation Plan to restore and protect Delta water supply, water quality, and ecosystem health. Other current and future programs include surface and groundwater storage and water transfers. By 2020, with these programs, MWD's maximum supply capability is approximately 1.2, 1.3, and 2.4 MAF for multiple dry years, a single dry year, and an average year, respectively.

5.3. **WATER SUPPLY CONTINGENCY PLANNING**

(Legislative Requirements 37, 38, 39, 41 and 42)

5.3.1 Introduction

The Water Code requires the UWMP to address contingency planning for catastrophic water supply interruption, including a review of the agency's interruption plan, water shortage response ordinance, and specific methods to reduce water use by up to 50 percent if necessary.

5.3.2 Catastrophic Interruption

The City of Poway meets federal and state guidelines for planning for potential hazards. The Water Code requires the UWMP to describe actions that would be taken by the water supplier to prepare for a catastrophic interruption of water supply including, but not limited to, a regional power outage, earthquake, or other disaster. The City of Poway has a catastrophic supply interruption plan that includes: interruption of raw water from SDCWA, interruption of Poway's delivery and distribution systems, and non-drought related events. A summary of the City's catastrophic supply interruption plan is provided below in Figure 8.

Figure 8 - Catastrophic Supply Interruption Plan

Possible Catastrophe	Summary of Action
Regional Power Outage	Use emergency generators at critical facilities.
Earthquake affecting Poway's Raw Water Supply	Use stored water in Lake Poway and implement Water Conservation Plan.
System Failure affecting Poway's Raw Water Supply	Use stored water in Lake Poway and implement Water Conservation Plan.
System Failure at Poway Water Treatment Plant	Isolate problem areas of plant and operate plant manually.
System Failure in Poway Distribution System	Isolate problem areas and restore service outward from the Treatment Plant.

In 1970-1971, the City of Poway (Poway Municipal Water District) constructed Lake Poway to store 3,400 AF of raw water for catastrophic interruptions of the water supply. The dam is inspected and monitored on a regular basis. This volume is approximately 25 percent of the City's average annual deliveries over the past 10 years and would provide the City with adequate water supplies for three to six months, depending on the season and conservation levels.

In 2004 the City completed a Hazard Mitigation Plan as part of the County of San Diego's Hazard Mitigation Plan submitted to the State of California Office of Emergency Services. The City of Poway also completed a vulnerability assessment of its water system and submitted it and the emergency response plan to the Environmental Protection Agency and the State of California.

If a major catastrophe affected the ability of SDCWA to provide Poway with raw water, Poway would still have raw water in Lake Poway and some potable water in storage reservoirs. For example, assuming Lake Poway is at its maximum operating level, and the City Council activated the 20 percent level of the Water Conservation Plan, the City could provide water to its customers for up to four months (nine MGD). If major regional raw water supply deficiencies occurred, the extent to which Poway could meet water demand from its customers would be proportional to conservation. For example, if Poway's supply of imported raw water was totally disrupted and Poway instituted 50 percent conservation, it is estimated that the City could supply potable water to Poway customers for up to six months (five MGD).

Currently, Poway's Water Treatment Plant is its only source of potable water. The City of Poway's long-range plan includes exploring construction of a SDCWA connection to bring potable water to Poway in times of emergency. In addition, the City could explore possibly procuring emergency water from the City of San Diego and the Ramona Municipal Water District because Poway shares service boundaries with them. Poway's active leadership and participation with SDCWA ensures that the priority water needs of the City and the region are adequately met.

SDCWA is developing its Emergency Storage Project (ESP) to reduce the risk of potential catastrophic damage that could result from a prolonged interruption of imported water due to earthquake, drought, or other natural disasters. The ESP is a system of reservoirs, pipelines, and other facilities. The San Vicente Dam raise, currently under construction, is the last major component and should be completed in 2012. When complete, the ESP will provide up to six months of emergency water storage in the San Diego region, and a 75 percent level of service to the member agencies during a catastrophic interruption.

The City also maintains diesel generators at the Water Treatment Plant so it can continue operating in the event of a power outage.

In response to regional wildfires in 2003 and 2007, Poway implemented a comprehensive plan to ensure backup power and redundant water sources for pumped zones. Every pump station now has provisions to operate using mobile and stationary generators purchased by the City.

5.3.3 Water Shortage Contingency Legislation

Poway's Water Conservation Plan, Chapter 8.94 of the Poway Municipal Code, is attached as Appendix F. It was adopted by the City Council on November 18, 2008, as Ordinance 682.

The purpose of Chapter 8.94 – Water Conservation Plan is to establish water management requirements necessary to conserve water, enable effective water supply planning, and assure reasonable and beneficial use of water. The plan is also meant to prevent waste of water, unreasonable use of water, and unreasonable methods of water use. The plan aims to assure adequate supplies of water to meet the needs of the public, and further the public health, safety, and welfare, recognizing water is a scarce natural resource requiring careful management not only in times of drought, but at all times.

The Water Conservation Plan identifies four levels of action in response to a water supply shortage. The Water Conservation Plan also includes water use efficiency measures applicable at all times to all persons or businesses using City of Poway water, though the measures are not mandatory until Level 2 (or by separate, specific action of the Poway City Council at Level 1). Level 1 water conservation measures are voluntary and will be reinforced through local and regional public education and awareness measures. During water conservation Levels 2 through 4, conservation measures and water-use restrictions are mandatory and become increasingly restrictive in order to attain escalating conservation goals. Violations may be subject to administrative, civil, and criminal penalties and remedies specified in Chapter 8.94 and as provided elsewhere in the Poway Municipal Code.

The Water Conservation Plan specifies procedural and administrative requirements to implement a water shortage condition. Examples of situations that could trigger implementation of a water shortage condition include:

- General water supply shortage;
- Limited capacity in the San Diego County Water Authority distribution facilities;
- Potential for a major failure of the supply or distribution facilities belonging to MWD, SDCWA, and/or the City; or
- Conditions prevailing in San Diego County that require water resources available be put to maximum beneficial use.

5.3.4 Consumption Reduction Methods and Mandatory Prohibitions During Water Shortages

The Water Conservation Plan includes water use efficiency measures applicable at all times to all persons or businesses using City of Poway water, though the measures are not mandatory until Level 2 (or by separate, specific action of the Poway City Council at Level 1).

Table 36 – Water Shortage Contingency – Water Use Efficiency Measures

Examples of Prohibitions	Stage When Prohibition Becomes Mandatory
No washing down paved surfaces, including sidewalks, driveways, parking lots, except when necessary to alleviate safety or sanitation hazards.	Voluntary at Level 1 Mandatory at Levels 2-4
No water waste from inefficient landscape irrigation.	Voluntary at Level 1 Mandatory at Levels 2-4
Landscape irrigation for residential and commercial properties allowed only before 10:00am and after 6:00pm.	Voluntary at Level 1 Mandatory at Levels 2-4
Use only a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas not irrigated by an irrigation system.	Voluntary at Level 1 Mandatory at Levels 2-4
Irrigate nursery and commercial grower's products before 10:00am and after 6:00pm only.	Voluntary at Level 1 Mandatory at Levels 2-4
Use only recirculated water to operate ornamental fountains.	Voluntary at Level 1 Mandatory at Levels 2-4
Wash vehicles only using a bucket and a hand-held hose with a positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that recirculates water on-site. Do not wash vehicles during hot conditions when additional water is required due to evaporation.	Voluntary at Level 1 Mandatory at Levels 2-4
Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.	Voluntary at Level 1 Mandatory at Levels 2-4
Do not use single-pass cooling equipment in new commercial applications, including, but not limited to, air compressors, vacuum pumps, and ice machines.	Voluntary at Level 1 Mandatory at Levels 2-4
Use a water recirculation system for commercial conveyor car washes and all new commercial laundry systems.	Voluntary at Level 1 Mandatory at Levels 2-4
Run only fully loaded dishwashers and washing machines.	Voluntary at Level 1 Mandatory at Levels 2-4
Repair all water leaks within five days of notification by the City of Poway, unless other arrangements are made with the City Manager.	Voluntary at Level 1 Mandatory at Levels 2-4
Use recycled or non-potable water for construction purposes to the fullest extent possible when available.	Voluntary at Level 1 Mandatory at Levels 2-4

Each of the four water shortage response levels identified in the Water Conservation Plan identifies water use restrictions of increasing severity.

Table 37 – Water Shortage Contingency – Consumption Reduction Methods

Consumption Reduction Method	Level Method Takes Effect	Projected Reduction (%)
Voluntarily, reset irrigation clocks as necessary to water once per week in winter and not more than three times per week in summer.	Level 1	Up to 10%
Voluntarily, add water only when necessary to maintain the level of water in swimming pools and spas (to ensure proper operation of the pool filter). Voluntarily use a cover on all single-family residential pools and spas.	Level 1	Up to 10%
Voluntarily, restaurants and other food service establishments should only serve and refill water upon request.	Level 1	Up to 10%
Landscape watering shall be conducted only in conformance with landscape watering schedules and restrictions for commercial and residential properties approved by the City Manager. Watering schedule and restrictions address factors such as how many days during the week, which days of the week, the amount of time per watering station, and other pertinent details. Landscape restrictions are progressively more restrictive at each level.	Levels 2, 3 & 4	Up to 20%, 40%, 50%
All leaks shall be repaired within seventy-two (72) hours of notification by the City of Poway, unless other arrangements are made with the City Manager.	Level 2	Up to 20%
Ornamental fountains or similar decorative water features shall not be operated unless reclaimed water is used.	Level 2	Up to 20%
Vehicles shall not be washed except at commercial car washes that recirculate water, or by high pressure/low volume wash systems.	Level 3	Up to 40%
Emptying and refilling swimming pools and spas is prohibited unless approved by the City Manager.	Level 3	Up to 40%
All leaks shall be repaired within forty-eight (48) hours of notification by the City of Poway, unless other arrangements are made with the City Manager.	Level 3	Up to 40%
By separate action, the City Council may mandate no new potable water service (temporary or permanent meters).	Level 3	Up to 40%
By separate action, the City Council may suspend consideration of new annexations to the service area.	Level 3	Up to 40%
No irrigation of landscape, except crops and landscape products of commercial growers and nurseries and several additional exceptions.	Level 4	More than 40%
All leaks shall be repaired within twenty-four (24) hours of notification by the City of Poway, unless other arrangements are made with the City Manager.	Level 4	More than 40%

5.3.5 Penalties and Charges for Violating Restrictions and Prohibitions

Section 8.94.140 – Water Conservation Plan – Enforcement of the Poway Municipal Code (Appendix F) addresses enforcement provisions associated with the City’s water shortage response plan, including penalties for violating the water use restrictions.

Figure 9 - Summary of Water Conservation Plan Enforcement Provisions

Violation	Enforcement Provision
First Violation	Warning Letter
Second Violation	\$100 Water Bill Surcharge
Third Violation	\$200 Water Bill Surcharge
Any Subsequent Violation within One-Year of Any Third Violation	\$500 Water Bill Surcharge and Possible Installation of a Flow Restrictor
Any Further Violation	Possible Water Service Turn-Off

5.3.6 Financial Impact of Water Shortages

This section describes how water shortages in Poway would likely impact revenues. It also describes how the implementation of a water shortage program would impact expenditures for additional supply of raw water, changes to computer programs, and changes to the billing process.

Poway’s Water Conservation Plan includes four water shortage response levels, including three levels of mandatory conservation, from up to 20 percent to more than 40 percent. Reductions in potable water sales would result. The impact would depend on the amount of sales reduction and the length of water shortage conditions. For example, if sales declined by ten percent for several months, the impact on revenue and operations would be mild. If a severe water shortage occurred, necessitating that the City declare a Level 4 - Water Shortage Emergency, requiring mandatory reduced water use of greater than 40 percent, the revenue impact would be substantial, particularly based on timing during the year and duration of the emergency.

Measures to overcome revenue impacts would include purchasing less raw water from SDCWA and processing less water at the Water Treatment Plant (potentially resulting in decreased chemical and energy costs). Potable water in reservoirs would be sold first, and the raw water in the Lake Poway reservoir would be accessed for treatment. The City Council could consider adjustments to water rates and billing strategy. Rates are adopted by Resolution of the City Council following an extensive public notification process as required by Proposition 218.

All water sales in Poway, both potable and recycled, are metered. Customers receive water bills bi-monthly and are charged based on metered use. The rate includes components for treatment, delivery, pumping, capital replacement, debt service, and administration. Millions of dollars have been invested in the Water Treatment Plant, reservoirs, and distribution system. Fixed costs and maintenance expenses occur regardless of customer usage. The "capacity" and "commodity"

Financial analysis of revenues and expenditures associated with the City's water system occurs continuously in several ways:

- During years when the City experiences higher than average rainfall, water sales tend to decrease, which also impacts actual revenue compared to projections.

SDCWA supplies raw water to the City of Poway. SDCWA's 2010 UWMP addresses water quality and water management strategies for the region. SDCWA purchases the majority of its water supply from MWD. MWD administers water quality programs.

Two of MWD's and SDCWA's main sources of water are the Colorado River and the State Water Project. The water quality challenges and management actions for these sources are described below. A more comprehensive description can be found in MWD's and SDCWA's Urban Water Management Plans. A description of several local water quality challenges and actions are also described.

5.4.1 Colorado River

The Colorado River has several areas of water quality concern: salinity, perchlorate, and uranium. Sediments in the River's watershed are saline, and these salts are easily leached into the River. In response, MWD adopted a Salinity Management Policy in 1999 that sets a target of 500 parts per million total dissolved solids (TDS) for water delivered to customers, and achieves this by blending Colorado River water with State Water Project water that has a much lower TDS level. In addition, the seven states that use water from the River have formed the Colorado River Salinity Control Forum with a focus on preventing salt from entering the river.

Perchlorate is the main component in rocket fuel and can be found in other munitions. It is found in low levels in the Colorado River. The source of the perchlorate has been traced to two chemical manufacturing sites near Henderson, Nevada, adjacent to the Las Vegas Wash, a tributary to the River. The Nevada Department of Environmental Protection manages groundwater remediation projects for both sites and the perchlorate levels have been reduced. MWD and the Southern Nevada Water Authority monitor the progress closely.

While uranium occurs naturally in the Colorado River Watershed, agencies were also concerned about the potential for additional uranium to enter the River from mine tailings in Moab, Utah. The U.S. Department of Energy is moving the tailings away from the River and also improving the groundwater quality. This process is expected to be complete between 2019 and 2025.

5.4.2 State Water Project

Areas of water quality concern for the State Water Project include salinity, bromide, total organic carbon, and nutrients that result from seawater intrusion and agricultural runoff. Bromide and total organic carbon are a concern because when combined with disinfectants used in typical treatment processes, potentially harmful byproducts can be formed. The nutrients can increase nuisance algal and aquatic weed production and lead to taste and odor issues. There are State and Federal programs working to address these issues. In addition, MWD, SDCWA, and the City of Poway closely monitor imported water quality and adjust treatment processes accordingly.

5.4.3 Local Water Supplies

The quality of local surface waters is enhanced through a "source water protection approach." Local agencies, including the City of Poway, prepare source water assessments and sanitary surveys to identify and address potential contaminants.

In May 2010, the City of Poway identified the presence of Quagga Mussels in Lake Poway. Quagga Mussels are a challenge throughout the western United States. It is believed that Quagga Mussels entered the MWD system through water from the Colorado River. While Quagga Mussels do not negatively harm water quality like some contaminants, they are considered a highly-invasive

species. Their presence requires careful attention, including ongoing testing procedures and implementation of eradication and control strategies, because they can be highly destructive to water system infrastructure. In the future, more significant operational adjustments to mitigate Quagga Mussels may be required.

Locally within the City of Poway, as a result of recent significant reductions in water use, some pipelines flow at very low velocity and some distribution system storage tanks remain at relatively constant levels. Under these conditions, the disinfectant in the water can decline. The City of Poway completed a comprehensive modeling study of the entire distribution system to identify potential problems and adjusted operations to mitigate potential problems.

Since Poway does not anticipate any loss of supplies due to water quality impacts, no such loss is shown in *Table 30 – Water Quality – Current and Projected Supply Impacts* (Appendix B).

5.5 WATER SHORTAGE CONTINGENCY PLANNING *(Legislative Requirements 22, 35, 36, 43, 53)*

5.5.1 Water Supply Vulnerability

MWD and SDCWA supplies can vary by season, but these agencies as well as the City of Poway maintain storage facilities to avoid potential seasonal shortages. Both MWD and SDCWA supplies are vulnerable to multiple dry years, reflected in their supply projections. An assessment of supply during normal, dry, and multiple dry water years, including the percentage of supply compared to average/normal is provided in subsection 5.5.5.

5.5.2 Stages of Action During Shortages

In 2008, SDCWA developed a Model Drought Response Conservation Program Ordinance for use by SDCWA Member Agencies. DWR's 2008 Updated Urban Drought Guidebook was used as a reference. SDCWA's model drought ordinance is an appendix to their 2010 UWMP.

The City of Poway used the SDCWA model ordinance to develop a revised Water Conservation Ordinance, adopted by the Poway City Council on December 2, 2008, known as Poway Municipal Code Chapter 8.94 Water Conservation Plan (Appendix F). Poway's ordinance identifies four water shortage response levels. Level 4 – Water Shortage Emergency includes mandatory use restrictions and a conservation target above 40 percent.

5.5.3 Estimate of Minimum Available Water Supply During Next Three Years

As required by DWR, SDCWA completed this estimate using the same assumptions contained in the multiple dry year analysis described in subsection 5.5.5. Figure 10 is provided to comply with the UWMP requirements, showing the minimum City of Poway supplies calculated based on Poway's 2010-2011 allocation of SDCWA's supplies (2.62 percent of total SDCWA supplies). It is important to note that based on current supply and storage conditions statewide, SDCWA is not currently forecasting this supply scenario.

Figure 10 - Available Supplies for Poway During Next Three Years (AF)

Supplies	2012	2013	2014
SDCWA Total Available Supplies	555,154	582,148	603,629
Poway 2010-11 Supply as a Percent of SDCWA Total	2.62%	2.62%	2.62%
Poway Estimated Available Supply (2.62% of SDCWA total supply)	14,545	15,252	15,815

Based on this analysis, the City of Poway expects to have adequate supplies for normal demands in 2012 through 2014.

5.5.4 Measurement and Determination of Actual Water Savings

Should the City of Poway need to implement measures to reduce water use, an analysis of water use data would be completed, including an assessment of metered water deliveries by customer sector (e.g., customer water sales). Customer water meters are read bi-monthly, divided throughout the City into four billing cycles. Other ways to measure water use include comparisons of the amount of water purchased monthly from SDCWA and the volume of water treated at the Water Treatment Plant and placed into the distribution system.

5.5.5 Assessment of Water Supply During Normal, Dry, and Multiple Dry Years

SDCWA's demand estimates are based on member (retail) agencies complying with SBX7-7 targets. The City of Poway projections assume compliance with its SBX7-7 targets.

Within the drought period of 1987 through 1992, 1989 was identified as the single dry year, and 1990 through 1992 were identified as the multiple dry years. This information is shown in *Table 27 - Basis of Water Year Data* (Appendix B).

During the 1990-1992 drought period, Poway's demands were 11 to 30 percent greater than an average/normal year. This information is shown in *Table 28 - Supply Reliability - Historic Conditions* (Appendix B). The average/normal year demands were based upon an average per capita water use of approximately 214 GPCD during the non-drought years of a similar time period (1985 to 1995).

Normal Year

SDCWA's 2010 UWMP states, "If Metropolitan, the Water Authority and member agency supplies are developed as planned, along with achievement of the SBX7-7 retail conservation targets, no shortages are anticipated within the Water Authority's service area in a normal year through 2035." Therefore, *Table 32 - Supply and Demand Comparison - Normal Year* (Appendix B) shows no shortage (zero percent) of supply and demand through 2035.

Single Dry Year

For a single dry year condition, SDCWA projected groundwater and surface water yields based upon historic 1989 supplies during the 1987-1992 drought. The supplies available from projected recycled and groundwater recovery projects were assumed to have little, if any, reduction during a single dry year. SDCWA's supplies from the Imperial Irrigation District (IID) conserved water transfers, water obtained through agreements to line previously unlined canals, and seawater desalination supplies were considered "drought proof." It was assumed that MWD would have adequate supplies in storage and would not be allocating supplies. With these assumptions, SDCWA's 2010 UWMP states, "If Metropolitan, the Water Authority and member agency supplies are developed as planned, along with achievement of the SBX7-7 retail conservation targets, no shortages are anticipated within the Water Authority's service area in a single dry year through 2035." Therefore, *Table 33 – Supply and Demand Comparison – Single Dry Year* shows no shortage (zero percent) of supply and demand through 2035. In 1989, Poway's demand was approximately 10.5 percent greater than normal; this was used to project single dry year demands.

Multiple Dry Years

SDCWA's 2010 UWMP evaluates supplies for a three-year dry period in each five-year increment between 2010 and 2035. Member agencies' surface and groundwater yields reflect supplies available during the 1987-1992 drought in years 1990, 1991, and 1992. Projected SDCWA supplies include the IID transfer, canal lining projects, and the Carlsbad Seawater Desalination Project.

During multiple dry years, SDCWA assumes MWD will allocate water based on the "Preferential Right to Purchase Water," included in MWD's enabling legislation (Section 135). Under preferential rights, a member agency is entitled to receive water in proportion to its historical payments to MWD from property tax, readiness to serve charges, and other miscellaneous revenues. MWD's revenue from water sales is excluded. MWD's total dry year supplies are estimated at 1.8 MAF based on reduced deliveries from the State Water Project, the Colorado River, and limited storage supplies. For reference, during the current 2010-2011 period, MWD allocated 1.89 MAF.

The paragraphs below describe how various multiple dry year scenarios would impact water supplies for SDCWA and the City of Poway:

- ***2016-2018 - Multiple Dry Year Scenario***

SDCWA projects no supply shortage in 2016, an 11.4 TAF (1.7 percent) shortage in 2017, and a 6.5 TAF (0.9 percent) shortage in 2018. This relatively minor shortage occurs because the IID transfer supplies are not scheduled to be developed to their ultimate 200 TAF maximum deliveries during this period. SDCWA is able to minimize the shortage by using carry-over storage at San Vicente Reservoir (under construction) and out-of-region groundwater storage. This carry-over storage is assumed to be full at the start of the dry period and one-third of the storage is utilized each year. These small shortages will be handled by management actions including dry year transfers, extraordinary water conservation, and voluntary or mandatory water-use restrictions. SDCWA has been successful in securing dry year transfers during the current 2010-2011 allocation.

A proportionate share of any SDCWA supply shortage would be allocated to Poway. The City would implement management actions including extraordinary water conservation, and voluntary or mandatory water-use restrictions, as described earlier in this Section.

- **2021-2023 – Multiple Dry Year Scenario**

SDCWA projects a supply surplus.

- **2026-2028 - Multiple Dry Year Scenario**

SDCWA projects no supply shortage in 2026 and 2027 and an 11.8 TAF (1.4 percent) gap in 2028. This small difference (11.8 TAF) would be addressed using the management actions described previously, such as water restrictions or dry year transfers.

- **2031-2033 - Multiple Dry Year Scenario**

SDCWA projects no supply shortage in 2031, a 21.0 TAF (2.6 percent) gap in 2032, and a 51.9 TAF (6.3 percent) gap in 2033. This gap is due primarily to growth and would be handled by management actions.

Table 34 – Supply and Demand Comparison – Multiple Dry Year Events (Appendix B) was prepared assuming Poway’s supply as a percentage of demand would be the same as that of SDCWA.

SDCWA Water Supply Reliability Assessment - Scenario Planning

In addition to the multiple dry year analysis summarized above, SDCWA completed scenario planning to address supply uncertainty by developing and testing a wide range of scenarios. The focal question of SDCWA’s analysis was, “In this climate of supply uncertainty and scarcity, how will the Water Authority and its member agencies adaptively provide water supply reliability over the next 20 years?” Six scenarios were tested and results are summarized in Figure 11.

Figure 11 - SDCWA Supply Reliability Scenarios

Scenario Number	Scenario Description	Results – Supplies
1	Drought (2030). Dry Year with MWD Allocating Supplies Based on Preferential Rights	Able to meet projected dry year demands through Quantification Settlement Agreement (QSA) Supplies, seawater desalination, SBX7-7 conservation, carryover storage, and MWD supplies (337 TAF)
2	Drought (2030). Same as 1 except Further Limitations on MWD Supplies	A supply gap of 54 TAF (of 900 TAF). Same supplies as Scenario 1 except MWD supplies at 281 TAF.
3	Drought (2030). Same as 2 except Local Supplies do not Develop as Planned. SBX7-7 Target Lowered	A supply gap of 63 TAF (of 900 TAF). Same supplies as Scenario 2 except local supplies are reduced to 60 TAF and SBX7-7 conservation savings is increased to 120 TAF. This represents a case where there is continued compliance with SBX7-7 but local recycled supplies do not develop as planned.
4	Drought (2030). Same as 3 except the Carlsbad Desalinated Seawater Project is not Developed as Planned	A supply gap of 119 TAF (of 900 TAF).
5	Demographic Shift – Changes in Land Use and Water Use	A gradual change in water demands that would be identified and accounted for in each five-year update of the UWMP. “Accelerated Forecasted Growth” included in the regional total demand forecast to account for potential increases.
6	Climate Change	Impacts could include loss of natural snowpack storage, sea level rise, changes in average precipitation and runoff volume, change in frequency and intensity of droughts, and changes in demand levels. Previous scenarios likely cover the range of near-term shortfalls.

The City of Poway is committed to water use efficiency and conservation. Water conservation is a key component in Southern California's strategy to meet water demand. The City of Poway has proactively supported water conservation through City and SDCWA programs since the early 1990s. Poway has water conservation and reclamation measures in the development review process in order to implement strategies set forth in the Poway General Plan.

Poway's efforts to promote and achieve water conservation have included the Demand Management Measures specified by the California Water Code, as well as other programs tailored to meet the specific needs of Poway water customers.

The City of Poway has been a signatory member of the California Urban Water Conservation Council (CUWCC) since 1997. Poway has implemented the Demand Management Measures (DMMs) by adhering to the CUWCC Best Management Practices (BMPs) and participating in the conservation efforts of the City's two wholesale water suppliers, MWD and SDCWA. While Poway has offered some programs independently, most of Poway's water conservation programs have been offered in partnership with MWD and SDCWA.

Since the 2005 UWMP was prepared, many changes have been made by the CUWCC to the BMPs and options for compliance. For the 2010 UWMP, CUWCC members have the option of submitting their 2009-2010 BMP annual reports in lieu of describing the DMMs in their UWMP, if the supplier is in full compliance with the CUWCC's Memorandum of Understanding Regarding Urban Water Conservation in California (the CUWCC MOU). Since the new CUWCC database was not complete at the time this plan was prepared and released for public review, the City of Poway self-certifies its full compliance with the MOU. Appendix G includes the City of Poway's 2009 and 2010 BMP Reports prepared for the CUWCC (submitted on May 19, 2011) and the coverage reports from the CUWCC showing the City of Poway's compliance with the BMPs for 2009 and 2010.

6.1 DEMAND MANAGEMENT MEASURES *(Legislative Requirements 26, 27, 28, and 29)*

The Water Code defines "Demand Management" as water conservation measures, programs, and incentives that prevent the waste of water and promote reasonable and efficient use and reuse of available supplies. Water conservation can be a relatively low-cost way to augment water supply. It is a critical part to the region's long-term strategy for meeting water demand. Section 10631(j) of the Water Code states "Urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivisions (f) and (g) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation," in California, dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum." Poway's Annual BMP Reports for 2009 and 2010 and the coverage reports from the CUWCC are included in Appendix G.

In 2009, the CUWCC significantly amended the structure of its BMPs and compliance strategies. In addition to complying with the Foundational BMPs, the City of Poway intends to use the “Gallon per Capita per Day” compliance option.

A brief description of how the City of Poway has implemented the demand management measures is provided below:

- ***Water Survey Programs for Single-Family/Multi-Family Residential Customers***
Poway offers indoor and outdoor water surveys for single-family residential customers at no cost. Outdoor water use surveys are available to multi-family residential properties.
- ***Residential Plumbing Retrofit***
Data from the 2001-2002 Residential Survey Program administered by SDCWA showed 80-95 percent saturation for high-efficiency showerheads. Between 1991 and 2002, SDCWA and its member agencies distributed over 550,000 showerheads. Since January 1, 1994, showerheads manufactured in the United States have a maximum 2.5 gallon per minute flow.
- ***System Water Audits, Leak Detection and Repair***
The City diligently monitors and controls water system losses using standards set by the American Water Works Association. The City also has a program for meter testing and replacement. Water loss as potential system leakage was 3.63 percent over the last ten years and 3.33 percent over the last three years, which is considered very good in the water industry.
- ***Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections***
All City of Poway service connections are metered and billed by volume of use. Meters are read and customers are charged bi-monthly. In addition to a variable commodity rate, there is also a fixed charge. In summer 2009, for single-family residential customers, the City implemented an inclining block rate structure; the rate per unit of water (one hundred cubic feet) increases as the amount of water use increases. Initially, there were five blocks, adjusted to two blocks in December 2010.
- ***Large Landscape Conservation Programs and Incentives***
Using geographic information system computer software created by SDCWA (WaterSmart Target), the City of Poway created informational water targets for approximately 50 properties with large areas of landscaping and dedicated potable water irrigation meters (out of about 200). These water use targets are for informational purposes only and are not used to set pricing for these customers. Water use surveys oriented to large landscape customers were also offered to a mobilehome park, cemetery, and a golf course.
- ***High-Efficiency Washing Machine Rebate Programs***
Poway has had strong participation in the high-efficiency washing machine rebate program, co-funded by San Diego Gas & Electric, MWD, and SDCWA. When funding for this program was temporarily unavailable from MWD and SDCWA (spring-summer 2009), the City of Poway independently funded this program.

- ***Public Information Program***

In addition to public education offered regionally by MWD and SDCWA, the City of Poway has its own tailored public education program which can be scaled in scope depending on need. Local public education efforts include newsletter articles, a detailed web site, street fair booths, landscape classes, a landscape contest, classroom visits, and presentations to community groups.

- ***School Education Programs***

In addition to public education offered regionally by SDCWA, the City of Poway has offered its own school education programs, including fourth-grade classroom presentations, a poster contest, and funding of Splash Lab visits to local schools (a mobile water science laboratory).

- ***Conservation Programs for Commercial, Industrial, and Institutional Accounts***

Several conservation programs are available in partnership with SDCWA and MWD for Commercial, Industrial, and Institutional (CII) accounts, including rebate programs for water efficient equipment and plumbing devices and outdoor water use evaluations/irrigation check-ups.

- ***Conservation Pricing***

Water and sewer rates for City of Poway customers are set volumetrically based on quantity of water use. Single-family residential water rates are charged according to an inclining two-block rate structure to further encourage efficient water use. Sewer charges are also based on volume of water use.

- ***Water Conservation Coordinator***

A City of Poway employee from the Public Works Department is designated as the Water Conservation Coordinator.

- ***Water Waste Prohibition***

Poway Municipal Code Chapter 8.94 – Water Conservation Plan establishes water use efficiency measures to prohibit wasteful water use. Amendments were made to the ordinance and adopted by the Poway City Council in December 2008.

- ***Residential Ultra-Low Flow Toilet Replacement Program***

The City of Poway has offered residential customers financial incentives to replace toilets with more water-efficient models since the early 1990s, in partnership with SDCWA and MWD. MWD discontinued incentives for residential toilets in May 2010 based on market saturation. Therefore, this program is no longer available.

6.2 EVALUATION OF DEMAND MANAGEMENT MEASURE EFFECTIVENESS

The City of Poway evaluates effectiveness of demand management measures by considering and analyzing factors such as participation, program cost, and estimated water savings.

6.3 WATER SAVINGS ATTRIBUTABLE TO DEMAND MANAGEMENT MEASURES

Since 2006, Poway water use has decreased by approximately 38 percent. While much of this savings is attributable to demand management measures, there were also other drivers, and it is very difficult to assign savings to specific measures. For example, conservation pricing, combined with public education, was likely a significant driver. Other DMM program offerings were public resources for customers to help them respond to the public education and steep price increases.

PROJECTED CLIMATE CHANGE IMPACT ON WATER DEMANDS

This section is optional in the 2010 UWMP. The City of Poway did not conduct an independent investigation of climate change impacts on water demands. The City's water supply is provided entirely by SDCWA. SDCWA completed a brief investigation into possible climate change impacts on water supply, which can be found in their 2010 UWMP.

CALIFORNIA URBAN WATER MANAGEMENT PLANNING ACT AND SBX7-7

CALIFORNIA WATER CODE DIVISION 6

PART 2.6. URBAN WATER MANAGEMENT PLANNING

All California Codes have been updated to include the 2010 Statutes.

CHAPTER 1.	GENERAL DECLARATION AND POLICY	10610-10610.4
CHAPTER 2.	DEFINITIONS	10611-10617
CHAPTER 3.	URBAN WATER MANAGEMENT PLANS	
Article 1.	General Provisions	10620-10621
Article 2.	Contents of Plans	10630-10634
Article 2.5.	Water Service Reliability	10635
Article 3.	Adoption and Implementation of Plans	10640-10645
CHAPTER 4.	MISCELLANEOUS PROVISIONS	10650-10656

WATER CODE

SECTION 10610-10610.4

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.
- (4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.
- (5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.
- (6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.
- (7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.
- (8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
- (9) The quality of source supplies can have a significant impact

on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

10610.4. The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

WATER CODE

SECTION 10611-10617

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

10612. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city

and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

WATER CODE

SECTION 10620-10621

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621. (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water

supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

WATER CODE

SECTION 10630-10634

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

(1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.

(2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) (1) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

- (A) An average water year.
- (B) A single dry water year.
- (C) Multiple dry water years.

(2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses:

- (A) Single-family residential.
- (B) Multifamily.
- (C) Commercial.
- (D) Industrial.
- (E) Institutional and governmental.
- (F) Landscape.
- (G) Sales to other agencies.
- (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:

- (A) Water survey programs for single-family residential and multifamily residential customers.
- (B) Residential plumbing retrofit.
- (C) System water audits, leak detection, and repair.
- (D) Metering with commodity rates for all new connections and retrofit of existing connections.
- (E) Large landscape conservation programs and incentives.
- (F) High-efficiency washing machine rebate programs.
- (G) Public information programs.
- (H) School education programs.
- (I) Conservation programs for commercial, industrial, and institutional accounts.

- (J) Wholesale agency programs.
- (K) Conservation pricing.
- (L) Water conservation coordinator.
- (M) Water waste prohibition.
- (N) Residential ultra-low-flush toilet replacement programs.
- (2) A schedule of implementation for all water demand management measures proposed or described in the plan.
- (3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.
- (4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.
- (g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:
 - (1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.
 - (2) Include a cost-benefit analysis, identifying total benefits and total costs.
 - (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
 - (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
- (h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
- (i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
- (j) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivisions (f) and (g) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California,"

dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

(k) Urban water suppliers that rely upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

10631.1. (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

10631.5. (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).

(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

(4) (A) Notwithstanding paragraph (1), the department shall

determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.

(B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.

(b) (1) The department, in consultation with the state board and the California Bay-Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:

(A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.

(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.

(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

(i) Compliance on an individual basis.

(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.

(B) The department may require additional information for any determination pursuant to this section.

(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of

the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).

(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.

(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.

(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.

10631.7. The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches. The panel shall consist of no more than seven members, who shall be selected by the department to reflect a balanced representation of experts. The panel shall have at least one, but no more than two, representatives from each of the following: retail water suppliers, environmental organizations, the business community, wholesale water suppliers, and academia. The panel shall be convened by January 1, 2009, and shall report to the Legislature no later than January 1, 2010, and every five years thereafter. The department shall review the panel report and include in the final report to the Legislature the department's recommendations and comments regarding the panel process and the panel's recommendations.

10632. (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

(1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.

(2) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic

sequence for the agency's water supply.

(3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

(4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(6) Penalties or charges for excessive use, where applicable.

(7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

(8) A draft water shortage contingency resolution or ordinance.

(9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

(b) Commencing with the urban water management plan update due December 31, 2015, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's

service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

WATER CODE

SECTION 10635

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

WATER CODE

SECTION 10640-10645

10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630).

The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

(c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report those water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section

10631, that achieve water savings significantly above the levels established by the department to meet the requirements of Section 10631.5.

(2) The department shall distribute to the panel convened pursuant to Section 10631.7 the results achieved by the implementation of those water demand management measures described in paragraph (1).

(3) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

WATER CODE

SECTION 10650-10656

10650. Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the

"Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

Senate Bill No. 7

CHAPTER 4

An act to amend and repeal Section 10631.5 of, to add Part 2.55 (commencing with Section 10608) to Division 6 of, and to repeal and add Part 2.8 (commencing with Section 10800) of Division 6 of, the Water Code, relating to water.

[Approved by Governor November 10, 2009. Filed with
Secretary of State November 10, 2009.]

LEGISLATIVE COUNSEL'S DIGEST

SB 7, Steinberg. Water conservation.

(1) Existing law requires the Department of Water Resources to convene an independent technical panel to provide information to the department and the Legislature on new demand management measures, technologies, and approaches. "Demand management measures" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

This bill would require the state to achieve a 20% reduction in urban per capita water use in California by December 31, 2020. The state would be required to make incremental progress towards this goal by reducing per capita water use by at least 10% on or before December 31, 2015. The bill would require each urban retail water supplier to develop urban water use targets and an interim urban water use target, in accordance with specified requirements. The bill would require agricultural water suppliers to implement efficient water management practices. The bill would require the department, in consultation with other state agencies, to develop a single standardized water use reporting form. The bill, with certain exceptions, would provide that urban retail water suppliers, on and after July 1, 2016, and agricultural water suppliers, on and after July 1, 2013, are not eligible for state water grants or loans unless they comply with the water conservation requirements established by the bill. The bill would repeal, on July 1, 2016, an existing requirement that conditions eligibility for certain water management grants or loans to an urban water supplier on the implementation of certain water demand management measures.

(2) Existing law, until January 1, 1993, and thereafter only as specified, requires certain agricultural water suppliers to prepare and adopt water management plans.

This bill would revise existing law relating to agricultural water management planning to require agricultural water suppliers to prepare and adopt agricultural water management plans with specified components on or before December 31, 2012, and update those plans on or before December

31, 2015, and on or before December 31 every 5 years thereafter. An agricultural water supplier that becomes an agricultural water supplier after December 31, 2012, would be required to prepare and adopt an agricultural water management plan within one year after becoming an agricultural water supplier. The agricultural water supplier would be required to notify each city or county within which the supplier provides water supplies with regard to the preparation or review of the plan. The bill would require the agricultural water supplier to submit copies of the plan to the department and other specified entities. The bill would provide that an agricultural water supplier is not eligible for state water grants or loans unless the supplier complies with the water management planning requirements established by the bill.

(3) The bill would take effect only if SB 1 and SB 6 of the 2009–10 7th Extraordinary Session of the Legislature are enacted and become effective.

The people of the State of California do enact as follows:

SECTION 1. Part 2.55 (commencing with Section 10608) is added to Division 6 of the Water Code, to read:

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION

CHAPTER 1. GENERAL DECLARATIONS AND POLICY

10608. The Legislature finds and declares all of the following:

(a) Water is a public resource that the California Constitution protects against waste and unreasonable use.

(b) Growing population, climate change, and the need to protect and grow California's economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.

(c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.

(d) Reduced water use through conservation provides significant energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.

(e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.

(f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.

(g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.

(h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency.

(i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

10608.4. It is the intent of the Legislature, by the enactment of this part, to do all of the following:

(a) Require all water suppliers to increase the efficiency of use of this essential resource.

(b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.

(c) Measure increased efficiency of urban water use on a per capita basis.

(d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.

(e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.

(f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.

(g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.

(h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.

(i) Require implementation of specified efficient water management practices for agricultural water suppliers.

(j) Support the economic productivity of California's agricultural, commercial, and industrial sectors.

(k) Advance regional water resources management.

10608.8. (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.

(2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an

administrative proceeding. This paragraph shall become inoperative on January 1, 2021.

(3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.

(b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.

(d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

CHAPTER 2. DEFINITIONS

10608.12. Unless the context otherwise requires, the following definitions govern the construction of this part:

(a) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or contractor for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.

(b) "Base daily per capita water use" means any of the following:

(1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph (1) up to an additional five years to a maximum of

a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.

(c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.

(d) "Commercial water user" means a water user that provides or distributes a product or service.

(e) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.

(f) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

(g) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:

(1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.

(2) The net volume of water that the urban retail water supplier places into long-term storage.

(3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.

(4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.

(h) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.

(i) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.

(j) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.

(k) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure.

(l) "Process water" means water used for producing a product or product content or water used for research and development, including, but not limited to, continuous manufacturing processes, water used for testing and maintaining equipment used in producing a product or product content, and

water used in combined heat and power facilities used in producing a product or product content. Process water does not mean incidental water uses not related to the production of a product or product content, including, but not limited to, water used for restrooms, landscaping, air conditioning, heating, kitchens, and laundry.

(m) “Recycled water” means recycled water, as defined in subdivision (n) of Section 13050, that is used to offset potable demand, including recycled water supplied for direct use and indirect potable reuse, that meets the following requirements, where applicable:

(1) For groundwater recharge, including recharge through spreading basins, water supplies that are all of the following:

(A) Metered.

(B) Developed through planned investment by the urban water supplier or a wastewater treatment agency.

(C) Treated to a minimum tertiary level.

(D) Delivered within the service area of an urban retail water supplier or its urban wholesale water supplier that helps an urban retail water supplier meet its urban water use target.

(2) For reservoir augmentation, water supplies that meet the criteria of paragraph (1) and are conveyed through a distribution system constructed specifically for recycled water.

(n) “Regional water resources management” means sources of supply resulting from watershed-based planning for sustainable local water reliability or any of the following alternative sources of water:

(1) The capture and reuse of stormwater or rainwater.

(2) The use of recycled water.

(3) The desalination of brackish groundwater.

(4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.

(o) “Reporting period” means the years for which an urban retail water supplier reports compliance with the urban water use targets.

(p) “Urban retail water supplier” means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

(q) “Urban water use target” means the urban retail water supplier’s targeted future daily per capita water use.

(r) “Urban wholesale water supplier,” means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

CHAPTER 3. URBAN RETAIL WATER SUPPLIERS

10608.16. (a) The state shall achieve a 20-percent reduction in urban per capita water use in California on or before December 31, 2020.

(b) The state shall make incremental progress towards the state target specified in subdivision (a) by reducing urban per capita water use by at least 10 percent on or before December 31, 2015.

10608.20. (a) (1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011. Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis, as provided in subdivision (a) of Section 10608.28, and may determine the targets on a fiscal year or calendar year basis.

(2) It is the intent of the Legislature that the urban water use targets described in subdivision (a) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

(b) An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

(2) The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2016 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.

(3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.

(4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:

(A) Consider climatic differences within the state.

- (B) Consider population density differences within the state.
 - (C) Provide flexibility to communities and regions in meeting the targets.
 - (D) Consider different levels of per capita water use according to plant water needs in different regions.
 - (E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.
 - (F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.
- (c) If the department adopts a regulation pursuant to paragraph (4) of subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).
- (d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.
- (e) An urban retail water supplier shall include in its urban water management plan required pursuant to Part 2.6 (commencing with Section 10610) due in 2010 the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.
- (f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.
- (g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).
- (h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:
- (A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.
 - (B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.
- (2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its Internet Web site, and make written copies

available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.

(i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with subdivision (l) of Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

(j) An urban retail water supplier shall be granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.

10608.22. Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (b) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

10608.24. (a) Each urban retail water supplier shall meet its interim urban water use target by December 31, 2015.

(b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

(c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.

(d) (1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

(e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area, may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.

(f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.

(2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section 10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

10608.26. (a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

(1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.

(2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.

(3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.

(b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.

(c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the United States Department of Defense military installation's requirements under federal Executive Order 13423.

(d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

(2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

10608.28. (a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

- (1) Through an urban wholesale water supplier.
- (2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).
- (3) Through a regional water management group as defined in Section 10537.
- (4) By an integrated regional water management funding area.
- (5) By hydrologic region.
- (6) Through other appropriate geographic scales for which computation methods have been developed by the department.

(b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

10608.32. All costs incurred pursuant to this part by a water utility regulated by the Public Utilities Commission may be recoverable in rates subject to review and approval by the Public Utilities Commission, and may be recorded in a memorandum account and reviewed for reasonableness by the Public Utilities Commission.

10608.36. Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

10608.40. Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

10608.42. The department shall review the 2015 urban water management plans and report to the Legislature by December 31, 2016, on progress towards achieving a 20-percent reduction in urban water use by December 31, 2020. The report shall include recommendations on changes to water efficiency standards or urban water use targets in order to achieve

the 20-percent reduction and to reflect updated efficiency information and technology changes.

10608.43. The department, in conjunction with the California Urban Water Conservation Council, by April 1, 2010, shall convene a representative task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial water users, industrial water users, and institutional water users to develop alternative best management practices for commercial, industrial, and institutional users and an assessment of the potential statewide water use efficiency improvement in the commercial, industrial, and institutional sectors that would result from implementation of these best management practices. The taskforce, in conjunction with the department, shall submit a report to the Legislature by April 1, 2012, that shall include a review of multiple sectors within commercial, industrial, and institutional users and that shall recommend water use efficiency standards for commercial, industrial, and institutional users among various sectors of water use. The report shall include, but not be limited to, the following:

(a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.

(b) Evaluation of water demands for manufacturing processes, goods, and cooling.

(c) Evaluation of public infrastructure necessary for delivery of recycled water to the commercial, industrial, and institutional sectors.

(d) Evaluation of institutional and economic barriers to increased recycled water use within the commercial, industrial, and institutional sectors.

(e) Identification of technical feasibility and cost of the best management practices to achieve more efficient water use statewide in the commercial, industrial, and institutional sectors that is consistent with the public interest and reflects past investments in water use efficiency.

10608.44. Each state agency shall reduce water use on facilities it operates to support urban retail water suppliers in meeting the target identified in Section 10608.16.

CHAPTER 4. AGRICULTURAL WATER SUPPLIERS

10608.48. (a) On or before July 31, 2012, an agricultural water supplier shall implement efficient water management practices pursuant to subdivisions (b) and (c).

(b) Agricultural water suppliers shall implement all of the following critical efficient management practices:

(1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).

(2) Adopt a pricing structure for water customers based at least in part on quantity delivered.

(c) Agricultural water suppliers shall implement additional efficient management practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible:

(1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.

(2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.

(3) Facilitate the financing of capital improvements for on-farm irrigation systems.

(4) Implement an incentive pricing structure that promotes one or more of the following goals:

(A) More efficient water use at the farm level.

(B) Conjunctive use of groundwater.

(C) Appropriate increase of groundwater recharge.

(D) Reduction in problem drainage.

(E) Improved management of environmental resources.

(F) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.

(5) Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.

(6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.

(7) Construct and operate supplier spill and tailwater recovery systems.

(8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.

(9) Automate canal control structures.

(10) Facilitate or promote customer pump testing and evaluation.

(11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.

(12) Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:

(A) On-farm irrigation and drainage system evaluations.

(B) Normal year and real-time irrigation scheduling and crop evapotranspiration information.

(C) Surface water, groundwater, and drainage water quantity and quality data.

(D) Agricultural water management educational programs and materials for farmers, staff, and the public.

(13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.

(14) Evaluate and improve the efficiencies of the supplier's pumps.

(d) Agricultural water suppliers shall include in the agricultural water management plans required pursuant to Part 2.8 (commencing with Section 10800) a report on which efficient water management practices have been implemented and are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and 10 years in the future. If an agricultural water supplier determines that an efficient water management practice is not locally cost effective or technically feasible, the supplier shall submit information documenting that determination.

(e) The data shall be reported using a standardized form developed pursuant to Section 10608.52.

(f) An agricultural water supplier may meet the requirements of subdivisions (d) and (e) by submitting to the department a water conservation plan submitted to the United States Bureau of Reclamation that meets the requirements described in Section 10828.

(g) On or before December 31, 2013, December 31, 2016, and December 31, 2021, the department, in consultation with the board, shall submit to the Legislature a report on the agricultural efficient water management practices that have been implemented and are planned to be implemented and an assessment of the manner in which the implementation of those efficient water management practices has affected and will affect agricultural operations, including estimated water use efficiency improvements, if any.

(h) The department may update the efficient water management practices required pursuant to subdivision (c), in consultation with the Agricultural Water Management Council, the United States Bureau of Reclamation, and the board. All efficient water management practices for agricultural water use pursuant to this chapter shall be adopted or revised by the department only after the department conducts public hearings to allow participation of the diverse geographical areas and interests of the state.

(i) (1) The department shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirement in paragraph (1) of subdivision (b).

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

CHAPTER 5. SUSTAINABLE WATER MANAGEMENT

10608.50. (a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:

- (1) Revisions to the requirements for urban and agricultural water management plans.
- (2) Revisions to the requirements for integrated regional water management plans.
- (3) Revisions to the eligibility for state water management grants and loans.
- (4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.
- (5) Increased funding for research, feasibility studies, and project construction.
- (6) Expanding technical and educational support for local land use and water management agencies.

(b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

CHAPTER 6. STANDARDIZED DATA COLLECTION

10608.52. (a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

(b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

CHAPTER 7. FUNDING PROVISIONS

10608.56. (a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

10608.60. (a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the

Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.

(b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

CHAPTER 8. QUANTIFYING AGRICULTURAL WATER USE EFFICIENCY

10608.64. The department, in consultation with the Agricultural Water Management Council, academic experts, and other stakeholders, shall develop a methodology for quantifying the efficiency of agricultural water use. Alternatives to be assessed shall include, but not be limited to, determination of efficiency levels based on crop type or irrigation system distribution uniformity. On or before December 31, 2011, the department shall report to the Legislature on a proposed methodology and a plan for implementation. The plan shall include the estimated implementation costs and the types of data needed to support the methodology. Nothing in this section authorizes the department to implement a methodology established pursuant to this section.

SEC. 2. Section 10631.5 of the Water Code is amended to read:

10631.5. (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).

(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

(4) (A) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.

(B) For purposes of this paragraph, “not locally cost effective” means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.

(b) (1) The department, in consultation with the state board and the California Bay-Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:

(A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.

(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.

(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

(i) Compliance on an individual basis.

(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.

(B) The department may require additional information for any determination pursuant to this section.

(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).

(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.

(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.

(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.

SEC. 3. Part 2.8 (commencing with Section 10800) of Division 6 of the Water Code is repealed.

SEC. 4. Part 2.8 (commencing with Section 10800) is added to Division 6 of the Water Code, to read:

PART 2.8. AGRICULTURAL WATER MANAGEMENT PLANNING

CHAPTER 1. GENERAL DECLARATIONS AND POLICY

10800. This part shall be known and may be cited as the Agricultural Water Management Planning Act.

10801. The Legislature finds and declares all of the following:

- (a) The waters of the state are a limited and renewable resource.
- (b) The California Constitution requires that water in the state be used in a reasonable and beneficial manner.
- (c) Urban water districts are required to adopt water management plans.

(d) The conservation of agricultural water supplies is of great statewide concern.

(e) There is a great amount of reuse of delivered water, both inside and outside the water service areas.

(f) Significant noncrop beneficial uses are associated with agricultural water use, including streamflows and wildlife habitat.

(g) Significant opportunities exist in some areas, through improved irrigation water management, to conserve water or to reduce the quantity of highly saline or toxic drainage water.

(h) Changes in water management practices should be carefully planned and implemented to minimize adverse effects on other beneficial uses currently being served.

(i) Agricultural water suppliers that receive water from the federal Central Valley Project are required by federal law to prepare and implement water conservation plans.

(j) Agricultural water users applying for a permit to appropriate water from the board are required to prepare and implement water conservation plans.

10802. The Legislature finds and declares that all of the following are the policies of the state:

(a) The conservation of water shall be pursued actively to protect both the people of the state and the state's water resources.

(b) The conservation of agricultural water supplies shall be an important criterion in public decisions with regard to water.

(c) Agricultural water suppliers shall be required to prepare water management plans to achieve conservation of water.

CHAPTER 2. DEFINITIONS

10810. Unless the context otherwise requires, the definitions set forth in this chapter govern the construction of this part.

10811. "Agricultural water management plan" or "plan" means an agricultural water management plan prepared pursuant to this part.

10812. "Agricultural water supplier" has the same meaning as defined in Section 10608.12.

10813. "Customer" means a purchaser of water from a water supplier who uses water for agricultural purposes.

10814. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of that entity.

10815. "Public agency" means any city, county, city and county, special district, or other public entity.

10816. "Urban water supplier" has the same meaning as set forth in Section 10617.

10817. “Water conservation” means the efficient management of water resources for beneficial uses, preventing waste, or accomplishing additional benefits with the same amount of water.

CHAPTER 3. AGRICULTURAL WATER MANAGEMENT PLANS

Article 1. General Provisions

10820. (a) An agricultural water supplier shall prepare and adopt an agricultural water management plan in the manner set forth in this chapter on or before December 31, 2012, and shall update that plan on December 31, 2015, and on or before December 31 every five years thereafter.

(b) Every supplier that becomes an agricultural water supplier after December 31, 2012, shall prepare and adopt an agricultural water management plan within one year after the date it has become an agricultural water supplier.

(c) A water supplier that indirectly provides water to customers for agricultural purposes shall not prepare a plan pursuant to this part without the consent of each agricultural water supplier that directly provides that water to its customers.

10821. (a) An agricultural water supplier required to prepare a plan pursuant to this part shall notify each city or county within which the supplier provides water supplies that the agricultural water supplier will be preparing the plan or reviewing the plan and considering amendments or changes to the plan. The agricultural water supplier may consult with, and obtain comments from, each city or county that receives notice pursuant to this subdivision.

(b) The amendments to, or changes in, the plan shall be adopted and submitted in the manner set forth in Article 3 (commencing with Section 10840).

Article 2. Contents of Plans

10825. (a) It is the intent of the Legislature in enacting this part to allow levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

(b) This part does not require the implementation of water conservation programs or practices that are not locally cost effective.

10826. An agricultural water management plan shall be adopted in accordance with this chapter. The plan shall do all of the following:

(a) Describe the agricultural water supplier and the service area, including all of the following:

- (1) Size of the service area.
- (2) Location of the service area and its water management facilities.
- (3) Terrain and soils.
- (4) Climate.

- (5) Operating rules and regulations.
- (6) Water delivery measurements or calculations.
- (7) Water rate schedules and billing.
- (8) Water shortage allocation policies.
- (b) Describe the quantity and quality of water resources of the agricultural water supplier, including all of the following:
 - (1) Surface water supply.
 - (2) Groundwater supply.
 - (3) Other water supplies.
 - (4) Source water quality monitoring practices.
 - (5) Water uses within the agricultural water supplier's service area, including all of the following:
 - (A) Agricultural.
 - (B) Environmental.
 - (C) Recreational.
 - (D) Municipal and industrial.
 - (E) Groundwater recharge.
 - (F) Transfers and exchanges.
 - (G) Other water uses.
 - (6) Drainage from the water supplier's service area.
 - (7) Water accounting, including all of the following:
 - (A) Quantifying the water supplier's water supplies.
 - (B) Tabulating water uses.
 - (C) Overall water budget.
 - (8) Water supply reliability.
- (c) Include an analysis, based on available information, of the effect of climate change on future water supplies.
- (d) Describe previous water management activities.
- (e) Include in the plan the water use efficiency information required pursuant to Section 10608.48.

10827. Agricultural water suppliers that are members of the Agricultural Water Management Council, and that submit water management plans to that council in accordance with the "Memorandum of Understanding Regarding Efficient Water Management Practices By Agricultural Water Suppliers In California," dated January 1, 1999, may submit the water management plans identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of Section 10826.

10828. (a) Agricultural water suppliers that are required to submit water conservation plans to the United States Bureau of Reclamation pursuant to either the Central Valley Project Improvement Act (Public Law 102-575) or the Reclamation Reform Act of 1982, or both, may submit those water conservation plans to satisfy the requirements of Section 10826, if both of the following apply:

- (1) The agricultural water supplier has adopted and submitted the water conservation plan to the United States Bureau of Reclamation within the previous four years.

(2) The United States Bureau of Reclamation has accepted the water conservation plan as adequate.

(b) This part does not require agricultural water suppliers that are required to submit water conservation plans to the United States Bureau of Reclamation pursuant to either the Central Valley Project Improvement Act (Public Law 102-575) or the Reclamation Reform Act of 1982, or both, to prepare and adopt water conservation plans according to a schedule that is different from that required by the United States Bureau of Reclamation.

10829. An agricultural water supplier may satisfy the requirements of this part by adopting an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) or by participation in areawide, regional, watershed, or basinwide water management planning if those plans meet or exceed the requirements of this part.

Article 3. Adoption and Implementation of Plans

10840. Every agricultural water supplier shall prepare its plan pursuant to Article 2 (commencing with Section 10825).

10841. Prior to adopting a plan, the agricultural water supplier shall make the proposed plan available for public inspection, and shall hold a public hearing on the plan. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned agricultural water supplier pursuant to Section 6066 of the Government Code. A privately owned agricultural water supplier shall provide an equivalent notice within its service area and shall provide a reasonably equivalent opportunity that would otherwise be afforded through a public hearing process for interested parties to provide input on the plan. After the hearing, the plan shall be adopted as prepared or as modified during or after the hearing.

10842. An agricultural water supplier shall implement the plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan, as determined by the governing body of the agricultural water supplier.

10843. (a) An agricultural water supplier shall submit to the entities identified in subdivision (b) a copy of its plan no later than 30 days after the adoption of the plan. Copies of amendments or changes to the plans shall be submitted to the entities identified in subdivision (b) within 30 days after the adoption of the amendments or changes.

(b) An agricultural water supplier shall submit a copy of its plan and amendments or changes to the plan to each of the following entities:

- (1) The department.
- (2) Any city, county, or city and county within which the agricultural water supplier provides water supplies.
- (3) Any groundwater management entity within which jurisdiction the agricultural water supplier extracts or provides water supplies.
- (4) Any urban water supplier within which jurisdiction the agricultural water supplier provides water supplies.

(5) Any city or county library within which jurisdiction the agricultural water supplier provides water supplies.

(6) The California State Library.

(7) Any local agency formation commission serving a county within which the agricultural water supplier provides water supplies.

10844. (a) Not later than 30 days after the date of adopting its plan, the agricultural water supplier shall make the plan available for public review on the agricultural water supplier's Internet Web site.

(b) An agricultural water supplier that does not have an Internet Web site shall submit to the department, not later than 30 days after the date of adopting its plan, a copy of the adopted plan in an electronic format. The department shall make the plan available for public review on the department's Internet Web site.

10845. (a) The department shall prepare and submit to the Legislature, on or before December 31, 2013, and thereafter in the years ending in six and years ending in one, a report summarizing the status of the plans adopted pursuant to this part.

(b) The report prepared by the department shall identify the outstanding elements of any plan adopted pursuant to this part. The report shall include an evaluation of the effectiveness of this part in promoting efficient agricultural water management practices and recommendations relating to proposed changes to this part, as appropriate.

(c) The department shall provide a copy of the report to each agricultural water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearing designed to consider the effectiveness of plans submitted pursuant to this part.

(d) This section does not authorize the department, in preparing the report, to approve, disapprove, or critique individual plans submitted pursuant to this part.

CHAPTER 4. MISCELLANEOUS PROVISIONS

10850. (a) Any action or proceeding to attack, review, set aside, void, or annul the acts or decisions of an agricultural water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(1) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(2) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 120 days after submitting the plan or amendments to the plan to entities in accordance with Section 10844 or the taking of that action.

(b) In an action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an agricultural water supplier, on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse

of discretion is established if the agricultural water supplier has not proceeded in a manner required by law, or if the action by the agricultural water supplier is not supported by substantial evidence.

10851. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part. This part does not exempt projects for implementation of the plan or for expanded or additional water supplies from the California Environmental Quality Act.

10852. An agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

10853. No agricultural water supplier that provides water to less than 25,000 irrigated acres, excluding recycled water, shall be required to implement the requirements of this part or Part 2.55 (commencing with Section 10608) unless sufficient funding has specifically been provided to that water supplier for these purposes.

SEC. 5. This act shall take effect only if Senate Bill 1 and Senate Bill 6 of the 2009–10 Seventh Extraordinary Session of the Legislature are enacted and become effective.

O

**REQUIRED TABLES FOR
2010 URBAN WATER MANAGEMENT PLAN**

Required Tables

Table 1
Coordination with appropriate agencies

Coordinating Agencies ^{1,2}	Participated in developing the plan	Commented on the draft	Attended public meetings	Was contacted for assistance	Was sent a copy of the draft plan	Was sent a notice of intention to adopt	Not involved / No information
California Department of Water Resources				X			
California State Library							
San Diego County Water Authority	X			X		X	
San Diego Association of Governments (SANDAG)				X		X	
City of San Diego Public Utilities				X		X	
City of San Diego Planning Department						X	
City of Escondido				X			
County of San Diego						X	
County of San Diego, Local Agency Formation Commission						X	
General Public			X		X		
¹ Indicate the specific name of the agency with which coordination or outreach occurred. ² Check at least one box in each row.							

Table 2
Population — current and projected

	2010	2015	2020	2025	2030	2035 - optional	Data source ²
Service area population ¹	51,789	52,020	53,789	55,458	57,661	58,164	San Diego Association of Governments (SANDAG)
¹ Service area population is defined as the population served by the distribution system. See Technical Methodology 2: Service Area Population (2010 UWMP Guidebook, Section M). ² Provide the source of the population data provided.							

Subtracted East Poway from SANDAG data, as it is not served by the water system. East Poway population estimated by Poway Planning Department.

Table 3
Water deliveries — actual, 2005

	2005				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	12,567	9,538	0	0	9,538
Multi-family	147	667	0	0	667
Commercial	505	1,031	0	0	1,031
Industrial	49	138	0	0	138
Institutional/governmental	0	0	0	0	0
Landscape	352	1,311	0	0	1,311
Agriculture	13	28	0	0	28
Other	365	746	0	0	746
	13,998	13,459	0	0	13,459
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year					

Source -Poway Water System Statistics

Table 4
Water deliveries — actual, 2010

	2010				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	12,516	6,586	0	0	6,586
Multi-family	145	452	0	0	452
Commercial	745	1,076	0	0	1,076
Industrial	49	113	0	0	113
Institutional/governmental	0	0	0	0	0
Landscape	242	909	0	0	909
Agriculture	17	37	0	0	37
Other	32	243	0	0	243
Total	13,746	9,416	0	0	9,416
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year					

Source - Poway Water System Statistics

Table 5
Water deliveries — projected, 2015

	2015				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	12,736	8,232	0	0	8,232
Multi-family	149	513	0	0	513
Commercial	778	1,123	0	0	1,123
Industrial	64	149	0	0	149
Institutional/governmental	0	0	0	0	0
Landscape	243	1,089	0	0	1,089
Agriculture	17	37	0	0	37
Other	34	694	0	0	694
Total	14,021	11,837	0	0	11,837
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year					

Source - Population Times 2020 Target (215) less losses; 2015 split based on 2009 water use: Growth at SANDAG and Poway Provided Rates; see separate spreadsheet.

Required Tables

Table 6 Water deliveries — projected, 2020					
	2020				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	13,095	8,535	0	0	8,535
Multi-family	156	540	0	0	540
Commercial	797	1,151	0	0	1,151
Industrial	72	166	0	0	166
Institutional/governmental	0	0	0	0	0
Landscape	244	1,095	0	0	1,095
Agriculture	17	37	0	0	37
Other	35	715	0	0	715
Total	14,416	12,239	0	0	12,239
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year					

Source - Population Times 2020 Target (215) less losses; 2015 split based on 2009 water use: Growth at SANDAG and Poway Provided Rates; see separate spreadsheet.

Table 7 Water deliveries — projected 2025, 2030, and 2035						
	2025		2030		2035 - optional	
	metered		metered		metered	
Water use sectors	# of accounts	Volume	# of accounts	Volume	# of accounts	Volume
Single family	13,452	8,862	13,978	9,326	13,978	9,405
Multi-family	159	550	159	550	159	549
Commercial	805	1,162	810	1,170	815	1,177
Industrial	74	171	75	173	76	174
Institutional/governmental	0	0	0	0	0	0
Landscape	246	1,100	247	1,106	248	1,111
Agriculture	17	37	17	37	17	37
Other	36	737	37	759	38	782
Total	14,789	12,619	15,323	13,121	15,331	13,235
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year						

Source - Population Times 2020 Target (215) less losses; 2015 split based on 2009 water use: Growth at SANDAG and Poway Provided Rates; see separate spreadsheet.

Table 8 Low-income projected water demands					
Low Income Water Demands ¹	2015	2020	2025	2030	2035 - opt
Single-family residential (Cumulative new)	0.0	7.8	11.3	0.0	0.0
Multi-family residential (Cumulative new)	26.7	40.4	91.3	0.0	0.0
Total	27	48	103	0	0
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year					
¹ Provide demands either as directly estimated values or as a percent of demand.					

Source - City of Poway Low Income Housing Projections Spreadsheet

Table 9 Sales to other water agencies							
Water distributed	2005	2010	2015	2020	2025	2030	2035 - opt
Ramona Municipal Water District via SDCWA	236	0	200	200	200	200	200
name of agency							
name of agency							
Total	236	0	200	200	200	200	200
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							

Source - Estimate based on recent records and discussion with Tom Howard

Table 10 Additional water uses and losses							
Water use ¹	2005	2010	2015	2020	2025	2030	2035 -opt
Saline barriers	0	0	0	0	0	0	0
Groundwater recharge	0	0	0	0	0	0	0
Conjunctive use	0	0	0	0	0	0	0
Raw water	0	0	0	0	0	0	0
Recycled water	549	499	550	550	650	650	650
System losses	713	497	690	714	736	765	772
Other (define)	0	0	0	0	0	0	0
Total	1,262	996	1,240	1,264	1,386	1,415	1,422
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							
¹ Any water accounted for in Tables 3 through 7 are not included in this table.							

550 represents existing conditions, while 650 represents build-out of the Business Park recycled system. The average of 2009 and 2010 deliveries was 560. Losses are estimated at 5.51% (1998-2010) and 4.09% before 1998. 5.51% is the average difference between the clearwell meters and billed metered between FY 07 and FY 10. 4.09% is the average, not including potable water added to the recycled system.

Table 11 Total water use							
Water Use	2005	2010	2015	2020	2025	2030	2035 - opt
Total water deliveries (from Tables 3 to 7)	13,459	9,416	11,837	12,239	12,619	13,121	13,235
Sales to other water agencies (from Table 9)	236	0	200	200	200	200	200
Additional water uses and losses (from Table 10)	1,262	996	1,240	1,264	1,386	1,415	1,422
Total	14,957	10,412	13,277	13,703	14,205	14,736	14,857
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							

Table 12 Retail agency demand projections provided to wholesale suppliers							
Wholesaler	Contracted Volume ³	2010	2015	2020	2025	2030	2035 -opt
San Diego County Water Authority (Raw Domestic)	N/A	9,913	12,527	12,953	13,355	13,886	14,007
San Diego County Water Authority (to Ramona MWD)	N/A	0	200	200	200	200	200
City of San Diego Recycled	N/A	251	550	550	650	650	650
Total		10,164	13,277	13,703	14,205	14,736	14,857
GPCD			215	215	215	215	215

Required Tables

² The ending year must be between December 31, 2007 and December 31, 2010.

¹ Add the values in the column and divide by the number of rows.

¹ Add the values in the column and divide by the number of rows.

Units (circle one): **(acre-feet per year)** million gallons per year cubic feet per year

¹ Volumes shown here should be what was purchased in 2010 and what is anticipated to be purchased in the future. If these numbers differ from what is contracted, show the contracted quantities in Table 17.

² Volumes shown here should be consistent with Tables 17 and 18.

Units (circle one): **(acre-feet per year)** million gallons per year cubic feet per year

¹ Water volumes presented here should be accounted for in Table 16.

² If the water supplier is a wholesaler, indicate all customers (excluding individual retail customers) to which water is sold. If the water supplier is a retailer, indicate each wholesale supplier, if more than one.

³ Indicate the full amount of water

Required Tables

Table 18 Groundwater — volume pumped						
Basin name(s)	Metered or Unmetered ¹	2006	2007	2008	2009	2010
None	N/A	0	0	0	0	0
Total groundwater pumped		0	0	0	0	0
Groundwater as a percent of total water supply		0.00%	0.00%	0.00%	0.00%	0.00%
Units (circle one): acre-feet per year million gallons per year cubic feet per year						
¹ Indicate whether volume is based on volumetric meter data or another method						

Table 19 Groundwater — volume projected to be pumped					
Basin name(s)	2015	2020	2025	2030	2035 - opt
None	0	0	0	0	0
Total groundwater pumped	0	0	0	0	0
Percent of total water supply	0.00%	0.00%	0.00%	0.00%	0.00%
Units (circle one): acre-feet per year million gallons per year cubic feet per year					
Include future planned expansion					

Table 20 Transfer and exchange opportunities			
Transfer agency	Transfer or exchange	Short term or long term	Proposed Volume
None	0	0	0
Total	0	0	0
Units (circle one): acre-feet per year million gallons per year cubic feet per year			

Table 21 Recycled water — wastewater collection and treatment							
Type of Wastewater	2005	2010	2015	2020	2025	2030	2035 - opt
Wastewater collected in service area	4,375	3,571	3,716	3,905	3,867	3,905	3,944
Wastewater treated in service area	0	0	0	0	0	0	0
Volume that meets recycled water standard (SD N. City Plant)	865	705	734	771	764	771	779
Volume that meets recycled water standard (Esc. Hale Plant)	13.4	13.4	13.4	13.4	13.4	13.4	13.4
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							

Source - "Wastewater Collection - Actual and Estimates, Data for Table 22"

Table 22 Recycled water — non-recycled wastewater disposal							
Method of disposal	Treatment Level	2010	2015	2020	2025	2030	2035 - opt
Ocean (City of SD, N City Plant)	Secondary	2,819	2,935	3,086	3,055	3,086	3,117
Ocean (City of Esc., Hale Plant)	Secondary	34.7	34.7	34.7	34.7	34.7	34.7
Name of method							
Name of method							
Total		2,853	2,969	3,120	3,090	3,120	3,152
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							

Source - City of SD 80% not recycled, City of Escondido 88% not recycled

Table 23 Recycled water — potential future use							
User type	Description	Feasibility ¹	2015	2020	2025	2030	2035 - opt
Agricultural irrigation		Not	0	0	0	0	0
Landscape irrigation ²	Community Road/ Civic Center	Potentially	85	85	85	85	85
Commercial irrigation ³	South Poway Business Park Expansion	Feasible	0	0	0	0	0
Golf course irrigation	StoneRidge CC and Maderas GC	Potentially	0	0	0	0	0
Wildlife habitat		Not	0	0	0	0	0
Wetlands		Not	0	0	0	0	0
Industrial reuse	South Poway Business Park Expansion	Potentially	0	0	100	100	100
Groundwater recharge		Not	0	0	0	0	0
Seawater barrier		Not	0	0	0	0	0
Getothermal/Energy		Not	0	0	0	0	0
Indirect potable reuse		Not	0	0	0	0	0
Other (user type)		Not	0	0	0	0	0
Other (user type)		Not	0	0	0	0	0
Total		0	85	85	185	185	185
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							
¹ Technical and economic feasibility.							
² Includes parks, schools, cemeteries, churches, residential, or other public facilities)							
landscaping, toilets, HVAC, etc) and							

Source - Poway staff, grant application

Required Tables

Table 24 Recycled water — 2005 UWMP use projection compared to 2010 actual		
Use type	2010 actual use	2005 Projection for 2010 ¹
Agricultural irrigation	0	0
Landscape irrigation ²	0	0
Commercial irrigation ³	499	0
Golf course irrigation	0	0
Wildlife habitat	0	0
Wetlands	0	0
Industrial reuse	0	0
Groundwater recharge	0	0
Seawater barrier	0	0
Getothermal/Energy	0	0
Indirect potable reuse	0	0
Other (user type)	0	0
Other (user type)	0	0
Total	499	0
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year existing catagories or modified to the new catagories, at the discretion of the water supplier. ² Includes parks, schools, cemeteries, churches, residential, or other public facilities) nurseries, etc)		

Source - No projection was provided in the 2005 UWMP. Recycled water use from Tom Howard "Recycled Water" spreadsheet

Table 25 Methods to encourage recycled water use						
Actions	Projected Results					
	2010	2015	2020	2025	2030	2035 - opt
The Recycled Water Rate is 90 Percent of the Potable Rate	0	0	0	0	0	0
Exemption from Irrigation Watering Restrictions	0	0	0	0	0	0
Potential Financial Assistance for Onsite Irrigation System Retrofit						
Total	0	0	0	0	0	0
Units (circle one): acre-feet per year million gallons per year cubic feet per year						

Source - Poway staff

Table 26 Future water supply projects								
Project name ¹	Projected start date	Projected completion date	Potential project constraints ²	Normal-year supply ³	Single-dry year supply ³	Multiple-dry year first year supply ³	Multiple-dry year second year supply ³	Multiple-dry year third year supply ³
None - Poway will continue to rely on the SDCWA	N/A	N/A	0	0	0	0	0	0
Total			0	0	0	0	0	0
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year ¹ Water volumes presented here should be accounted for in Table 16. ² Indicate whether project is likely to happen and what constraints, if any, exist for project implementation. ³ Provide estimated supply benefits, if available.								

Table 27 Basis of water year data	
Water Year Type	Base Year(s)
Average Water Year (During 1986-1992 Drought Timeframe)	214 GPCD
Single-Dry Water Year	1989
Multiple-Dry Water Years	1990 - 1992

Source - SDCWA 2010 UWMP and Poway Baseline Data Table, 214 is the average GPCD of 1985 to 1995 not including drought years, 1987-1990, and 1992

Table 28 Supply reliability — historic conditions					
Average / Normal Water Year	Single Dry Water Year	Multiple Dry Water Years			
		Year 1	Year 2	Year 3	Year 4
	1989	1989	1990	1991	1992
Percent of Average/Normal Year:	110.0%	110.0%	130.0%	95.0%	111.0%

Source - SDCWA 2010 UWMP and Poway Baseline Data Table

Table 29 Factors resulting in inconsistency of supply							
Water supply sources ¹	Specific source name, if any	Limitation quantification	Legal	Environmental	Water quality	Climatic	Additional information
San Diego County Water Authority		0	0	0	0	0	0
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year ¹ From Table 16.							

Source - SDCWA 2010 UWMP no shortage projected due to diversity of supply sources

Table 30 Water quality — current and projected water supply impacts							
Water source	Description of condition	2010	2015	2020	2025	2030	2035 - opt
San Diego County Water Authority	Good; no impacts anticipated	0	0	0	0	0	0
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year							

Source - SDCWA 2010 UWMP

Required Tables

Table 31 Supply reliability — current water sources				
Water supply sources ¹	Average / Normal Water Year Supply ²	Multiple Dry Water Year Supply ²		
		Year 2012	Year 2013	Year 2014
San Diego County Water Authority (Raw Water)	215 GPCD	14,545	15,252	15,815
City of San Diego (Recycled)		550	550	550
Percent of normal year:	100.0%			
Units (circle one): (acre-feet per year) million gallons per year cubic feet per year				
¹ From Table 16.				
² See Table 27 for basis of water type years.				

Source - SDCWA 2010 UWMP Table 11-4 multiplied by 2.62% (Poway's allocation of total SDCWA supply).

Table 32 Supply and demand comparison — normal year					
	2015	2020	2025	2030	2035 - opt
Supply totals (from Table 16)	13,277	13,703	14,205	14,736	14,857
Demand totals (From Table 11)	13,277	13,703	14,205	14,736	14,857
Difference	0	0	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	0.0%
Units are in acre-feet per year.					

SDCWA 2010 UWMP Projects Meeting Normal Year Demands Through 2035

Table 33 Supply and demand comparison — single dry year					
	2015	2020	2025	2030	2035 - opt
Supply totals ^{1,2}	13,587	14,602	15,354	16,080	16,308
Demand totals ^{2,3,4}	13,587	14,602	15,354	16,080	16,308
Difference	0	0	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	0.0%
Units are in acre-feet per year.					
¹ Consider the same sources as in Table 16. If new sources of water are planned, add a column to the table and specify the source, timing, and amount of water.					
² Provide in the text of the UWMP text that discusses how single-dry-year water supply volumes were determined.					
³ Consider the same demands as in Table 3. If new water demands are anticipated, add a column to the table and specify the source, timing, and amount of water.					
⁴ The urban water target determined in this UWMP will be considered when developing the 2020 water demands included in this table.					

Source - SDCWA 2010 UWMP, Increased Poway's Demands by Same Percentage as SDCWA Demands. SDCWA Projects Meeting Single Dry Year Demands Through 2035

Table 34 Supply and demand comparison — multiple dry-year events						
		2015	2020	2025	2030	2035 - opt
Multiple-dry year first year supply	Supply totals ^{1,2}	13,693	14,670	15,486	16,111	
	Demand totals ^{2,3,4}	13,693	14,670	15,486	16,111	
	Difference	0	0	0	0	
	Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	
	Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	
Multiple-dry year second year supply	Supply totals ^{1,2}	13,958	15,189	16,047	16,203	
	Demand totals ^{2,3,4}	14,199	15,189	16,047	16,636	
	Difference	(241)	0	0	(433)	
	Difference as % of Supply	-1.7%	0.0%	0.0%	-2.7%	
	Difference as % of Demand	-1.7%	0.0%	0.0%	-2.6%	
Multiple-dry year third year supply	Supply totals ^{1,2}	14,808	15,924	16,646	16,225	
	Demand totals ^{2,3,4}	14,943	15,924	16,882	17,316	
	Difference	(135)	0	(236)	(1,091)	
	Difference as % of Supply	-0.9%	0.0%	-1.4%	-6.7%	
	Difference as % of Demand	-0.9%	0.0%	-1.4%	-6.3%	
Units are in acre-feet per year.						
¹ Consider the same sources as in Table 16. If new sources of water are planned, add a column to the table and specify the source, timing, and amount of water.						
² Provide in the text of the UWMP text that discusses how single-dry-year water supply volumes were determined.						
³ Consider the same demands as in Table 3. If new water demands are anticipated, add a column to the table and specify the source, timing, and amount of water.						
⁴ The urban water target determined in this UWMP will be considered when developing the 2020 water demands included in this table.						

Source - Assumed Poway's supply as a percent of demand was the same as the Water Authority's 2010 UWMP

Table 35 Water shortage contingency — rationing stages to address water supply shortages		
Stage No.	Water Supply Conditions	% Shortage
Level 1	A "Level 1 - Water Shortage Watch" condition exists when the City's wholesale	Voluntary up to 10%
Level 2	A "Level 2 - Water Shortage Alert" condition applies when the City's wholesale	Up to 20%
Level 3	A "Level 3 - Water Shortage Critical" condition applies when the City's wholesale	Up to 40%
Level 4	A "Level 4 - Water Shortage Critical" condition applies when the City's wholesale water supplier Board of Directors declares a water shortage emergency and notifies its member agencies that a demand reduction of more than 40 percent is required to meet anticipated needs.	More than 40%
One of the stages of action must be designed to address a 50 percent reduction in water supply.		

Required Tables

Table 36	
Water shortage contingency — mandatory prohibitions	
Examples of Prohibitions	Stage When Prohibition Becomes Mandatory
No washing down paved surfaces, including sidewalks, driveways, parking lots, except when necessary to alleviate safety or sanitation hazards.	Voluntary at Level 1 Mandatory at Level 2-4
No water waste from inefficient landscape irrigation.	Voluntary at Level 1 Mandatory at Level 2-4
Landscape irrigation for residential and commercial properties allowed only before 10:00am and after 6:00pm.	Voluntary at Level 1 Mandatory at Level 2-4
Use only a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas not irrigated by an irrigation system.	Voluntary at Level 1 Mandatory at Level 2-4
Irrigate nursery and commercial grower's products before 10:00am and after 6:00pm only.	Voluntary at Level 1 Mandatory at Level 2-4
Use only recirculated water to operate ornamental fountains.	Voluntary at Level 1 Mandatory at Level 2-4
Wash vehicles only using a bucket and a hand-held hose with a positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that recirculates water on-site. Do not wash vehicles during hot conditions when additional water is required due to evaporation.	Voluntary at Level 1 Mandatory at Level 2-4
Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.	Voluntary at Level 1 Mandatory at Level 2-4
Do not use single-pass cooling equipment in new commercial applications, including but not limited to air conditioners, air compressors, vacuum pumps, and ice machines.	Voluntary at Level 1 Mandatory at Level 2-4
Use a water recirculation system for commercial conveyor car washes and all new commercial laundry systems.	Voluntary at Level 1 Mandatory at Level 2-4
Run only fully loaded dishwashers and washing machines.	Voluntary at Level 1 Mandatory at Level 2-4
Repair all water leaks within five days of notification by the City of Poway, unless other arrangements are made with the City Manager.	Voluntary at Level 1 Mandatory at Level 2-4
Use recycled or non-potable water for construction purposes to the fullest extent possible when available.	Voluntary at Level 1 Mandatory at Level 2-4

Table 37		
Water shortage contingency — consumption reduction methods		
Consumption Reduction Methods	Stage when Method Takes Effect	Projected Reduction (%)
Voluntarily reset irrigation clocks as necessary to water once per week in winter and not more than three times per week in summer.	Level 1	Up to 10%
Voluntarily add water only when necessary to maintain the level of water in swimming pools and spas (to ensure proper operation of the pool filter). Voluntarily use a cover on all single-family residential pools and spas.	Level 1	Up to 10%
Voluntarily restaurants and other food service establishments should only serve and refill water upon request.	Level 1	Up to 10%
Landscape watering shall be conducted only in conformance with landscape watering schedules and restrictions for commercial and residential properties approved by the City Manager. The watering schedule and restrictions addresses factors such as how many days during the week, which days of the week, the amount of time per watering station, and other pertinent details. Landscape restrictions are progressively more restrictive at each level.	Level 2, 3 & 4	Up to 20%, 40%, 50%
All leaks shall be repaired within seventy-two (72) hours of notification by the City of Poway, unless other arrangements are made with the City Manager.	Level 2	Up to 20%
Ornamental fountains or similar decorative water features shall not be operated unless reclaimed water is	Level 2	Up to 20%
Vehicles shall not be washed except at commercial car washes that recirculate water, or by high pressure/low volume wash systems.	Level 3	Up to 40%
Emptying and refilling swimming pools and spas is prohibited unless approved by the City Manager.	Level 3	Up to 40%
All leaks shall be repaired within forty-eight (48) hours of notification by the City of Poway, unless other arrangements are made with the City Manager.	Level 3	Up to 40%
By separate action, the City Council may mandate no new potable water service (temporary or permanent meters).	Level 3	Up to 40%
By separate action, the City Council may suspend consideration of new annexations to the service area.	Level 3	Up to 40%
No irrigation of landscape, except crops and landscape products of commercial growers and nurseries and several additional exceptions.	Level 4	More than 40%
All leaks shall be repaired within twenty-four (24) hours of notification by the City of Poway, unless other arrangements are made with the City Manager.	Level 4	More than 40%

Table 38		
Water shortage contingency — penalties and charges		
Penalties or Charges	Stage when Penalty Takes Effect	
Warning letter for first violation of water waste restrictions.	Levels, 2, 3 & 4	
\$100 water bill surcharge for second violation of water waste restrictions.	Levels, 2, 3 & 4	
\$200 water bill surcharge for third violation of water waste restrictions within a 12-month period	Levels, 2, 3 & 4	
\$500 water bill surcharge for any subsequent violation within a 12-month period and possible installation of a flow restrictor.	Levels, 2, 3 & 4	
Any further violations may result in water service being turned off.	Levels, 2, 3 & 4	

**CITY OF POWAY 2010 URBAN WATER MANAGEMENT PLAN
IMPLEMENTATION DOCUMENTS**

**NOTICE OF CITY COUNCIL
PUBLIC HEARING**

NOTICE IS HEREBY GIVEN that the City Council of the City of Poway will hold a Public Hearing to consider the following item:

Resolution Adopting the City of Poway's 2010 Urban Water Management Plan and Rescinding Resolution No. 05-096

DATE OF MEETING:	June 7, 2011
TIME OF MEETING:	7:00 p.m.
LOCATION OF MEETING:	City Council Chambers 13325 Civic Center Drive Poway, CA 92064
PROJECT NAME:	Adoption of the 2010 Urban Water Management Plan
STAFF PLANNER:	Kristen Crane
PHONE NUMBER:	(858) 668-4707

ANY INTERESTED PERSON may review the staff report and the plans for this project and obtain additional information at the City of Poway, 13325 Civic Center Drive, Poway, California.

If you wish to express concerns in favor or against the above, you may appear in person at the above described meeting or submit your concerns in writing to the City Clerk, City of Poway. If you challenge the matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to, the public hearing.

If you have special needs requiring assistance at the meeting, please call the City Clerk's Office at (858) 668-4530 at least 24 hours prior to the meeting so that accommodations can be arranged.

Published in the Poway News Chieftain on **Thursday, May 25, 2011. Order No.**

**NOTICE OF CITY COUNCIL
PUBLIC HEARING**

NOTICE IS HEREBY GIVEN that the City Council of the City of Poway will hold a Public Hearing to consider the following item: Resolution Adopting the City of Poway's 2010 Urban Water Management Plan and Rescinding Resolution No. 05-096

DATE OF MEETING:

June 7, 2011

TIME OF MEETING: 7:00 p.m.

LOCATION OF MEETING:

City Council Chambers

13325 Civic Center

Drive, Poway, CA 92064

**PROJECT NAME: Adoption
of the 2010 Urban Water
Management Plan**

STAFF PLANNER:

Kristen Crane

PHONE NUMBER:

(858) 668-4707

ANY INTERESTED PERSON may review the staff report and the plans for this project and obtain additional information at the City of Poway, 13325 Civic Center Drive, Poway, California.

If you wish to express concerns in favor or against the above, you may appear in person at the above described meeting or submit your concerns in writing to the City Clerk, City of Poway. If you challenge the matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to, the public hearing.

If you have special needs requiring assistance at the meeting, please call the City Clerk's Office at (858) 668-4530 at least 24 hours prior to the meeting so that accommodations can be arranged.

Published in the **Poway** News Chief-tain on Thursday, May 26, 2011. Order No. **11-040**. P1909

CITY OF POWAY

DON HIGGINSON, Mayor
JIM CUNNINGHAM, Deputy Mayor
MERRILEE BOYACK, Councilmember
DAVE GROSCH, Councilmember
JOHN MULLIN, Councilmember



March 14, 2011

Dana Frieauf
San Diego County Water Authority
4677 Overland Drive
San Diego, CA 92123

RE: Notice of City of Poway's 2010 Urban Water Management Plan Preparation

Dear Ms. Frieauf:

This letter is to inform you that the City of Poway is updating its Urban Water Management Plan (UWMP). California State law requires urban water suppliers to update their UWMPs every five years and notify the cities and counties within their service area that a plan is being prepared. The City of Poway must adopt an updated UWMP by July 1, 2011, and submit the adopted plan to the California Department of Water Resources by August 1, 2011.

The UWMP is required to contain a detailed evaluation of the supplies necessary to reliably meet water demands in the City's service area over at least a 20-year period in both normal and dry years. In accordance with State law, the City of Poway will publish a copy of its draft 2010 UWMP for public review at least two weeks prior to holding a scheduled public hearing, tentatively planned for **June 7, 2011 at 7:00pm**. The plan will be available for review as part of the June 7, 2011 City Council meeting agenda packet at www.poway.org.

Please feel free to contact me at (858) 668-4707, or kcrane@poway.org, if you have any questions or would like additional information.

Sincerely,

Kristen Mignone Crane
Utilities Administrator

CITY OF POWAY

DON HIGGINSON, Mayor
JIM CUNNINGHAM, Deputy Mayor
MERRILEE BOYACK, Councilmember
DAVE GROSCHE, Councilmember
JOHN MULLIN, Councilmember



March 14, 2011

Bill Anderson
City Planning and Community Investment
City of San Diego
Mail Station 5A
202 C Street
San Diego, CA 92101

RE: Notice of City of Poway's 2010 Urban Water Management Plan Preparation

Dear Mr. Anderson:

This letter is to inform you that the City of Poway is updating its Urban Water Management Plan (UWMP). California State law requires urban water suppliers to update their UWMPs every five years and notify the cities and counties within their service area that a plan is being prepared. The City of Poway must adopt an updated UWMP by July 1, 2011, and submit the adopted plan to the California Department of Water Resources by August 1, 2011.

The UWMP is required to contain a detailed evaluation of the supplies necessary to reliably meet water demands in the City's service area over at least a 20-year period in both normal and dry years. In accordance with State law, the City of Poway will publish a copy of its draft 2010 UWMP for public review at least two weeks prior to holding a scheduled public hearing, tentatively planned for **June 7, 2011 at 7:00pm**. The plan will be available for review as part of the June 7, 2011 City Council meeting agenda packet at www.poway.org.

Please feel free to contact me at (858) 668-4707, or kcrane@poway.org, if you have any questions or would like additional information.

Sincerely,

Kristen Mignone Crane
Utilities Administrator

c: Roger Bailey, Director of Public Utilities
Ann Sasaki, Assistant Director of Public Utilities
Marsi Steirer, Deputy Director of Public Utilities

DON HIGGINSON, Mayor
JIM CUNNINGHAM, Deputy Mayor
MERRILEE BOYACK, Councilmember
DAVE GROSCH, Councilmember
JOHN MULLIN, Councilmember

CITY OF POWAY



March 14, 2011

Eric Gibson
Department of Planning and Land Use
County of San Diego
Mail Station 0650
5201-B Ruffin Road
San Diego, CA 92123

RE: Notice of City of Poway's 2010 Urban Water Management Plan Preparation

Dear Mr. Gibson:

This letter is to inform you that the City of Poway is updating its Urban Water Management Plan (UWMP). California State law requires urban water suppliers to update their UWMPs every five years and notify the cities and counties within their service area that a plan is being prepared. The City of Poway must adopt an updated UWMP by July 1, 2011, and submit the adopted plan to the California Department of Water Resources by August 1, 2011.

The UWMP is required to contain a detailed evaluation of the supplies necessary to reliably meet water demands in the City's service area over at least a 20-year period in both normal and dry years. In accordance with State law, the City of Poway will publish a copy of its draft 2010 UWMP for public review at least two weeks prior to holding a scheduled public hearing, tentatively planned for **June 7, 2011 at 7:00pm**. The plan will be available for review as part of the June 7, 2011 City Council meeting agenda packet at www.poway.org.

Please feel free to contact me at (858) 668-4707, or kcrane@poway.org, if you have any questions or would like additional information.

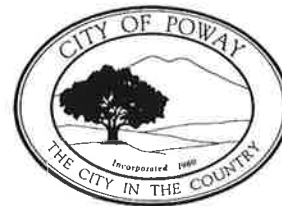
Sincerely,

Kristen Mignone Crane
Utilities Administrator

c: Devon Muto, County of San Diego

DON HIGGINSON, Mayor
JIM CUNNINGHAM, Deputy Mayor
MERRILEE BOYACK, Councilmember
DAVE GROSCH, Councilmember
JOHN MULLIN, Councilmember

CITY OF POWAY



March 14, 2011

Ingrid Hansen
Chief, Governmental Services
San Diego Local Agency Formation Commission (LAFCO)
1600 Pacific Highway, Room 452
San Diego, CA 92101

RE: Notice of City of Poway's 2010 Urban Water Management Plan Preparation

Dear Ms. Hansen:

This letter is to inform you that the City of Poway is updating its Urban Water Management Plan (UWMP). California State law requires urban water suppliers to update their UWMPs every five years and notify the cities and counties within their service area that a plan is being prepared. The City of Poway must adopt an updated UWMP by July 1, 2011, and submit the adopted plan to the California Department of Water Resources by August 1, 2011.

The UWMP is required to contain a detailed evaluation of the supplies necessary to reliably meet water demands in the City's service area over at least a 20-year period in both normal and dry years. In accordance with State law, the City of Poway will publish a copy of its draft 2010 UWMP for public review at least two weeks prior to holding a scheduled public hearing, tentatively planned for **June 7, 2011 at 7:00pm**. The plan will be available for review as part of the June 7, 2011 City Council meeting agenda packet at www.poway.org.

Please feel free to contact me at (858) 668-4707, or kcrane@poway.org, if you have any questions or would like additional information.

Sincerely,

Kristen Mignone Crane
Utilities Administrator

DON HIGGINSON, Mayor
JIM CUNNINGHAM, Deputy Mayor
MERRILEE BOYACK, Councilmember
DAVE GROSCHE, Councilmember
JOHN MULLIN, Councilmember

CITY OF POWAY



March 14, 2011

Charles Stoll
San Diego Association of Governments
401 B Street, Suite 800
Mail Station 980
San Diego, CA 92101

RE: Notice of City of Poway's 2010 Urban Water Management Plan Preparation

Dear Mr. Stoll:

This letter is to inform you that the City of Poway is updating its Urban Water Management Plan (UWMP). California State law requires urban water suppliers to update their UWMPs every five years and notify the cities and counties within their service area that a plan is being prepared. The City of Poway must adopt an updated UWMP by July 1, 2011, and submit the adopted plan to the California Department of Water Resources by August 1, 2011.

The UWMP is required to contain a detailed evaluation of the supplies necessary to reliably meet water demands in the City's service area over at least a 20-year period in both normal and dry years. In accordance with State law, the City of Poway will publish a copy of its draft 2010 UWMP for public review at least two weeks prior to holding a scheduled public hearing, tentatively planned for **June 7, 2011 at 7:00pm**. The plan will be available for review as part of the June 7, 2011 City Council meeting agenda packet at www.poway.org.

Please feel free to contact me at (858) 668-4707, or kcrane@poway.org, if you have any questions or would like additional information.

Sincerely,

Kristen Mignone Crane
Utilities Administrator

Kristen Crane

From: Kristen Crane
Sent: Monday, May 23, 2011 3:50 PM
To: 'dfrieauf@sdcwa.org'
Cc: kgage@sdcwa.org; 'tbombardier@sdcwa.org'
Subject: City of Poway - 2010 Urban Water Management Plan - Administrative Draft
Attachments: 2010 UWMP - Full Plan.pdf

Dana -

At the June 7, 2011, Poway City Council meeting, there will be a public hearing for Council adoption of the City's 2010 Urban Water Management Plan. As a stakeholder, in March 2011, a notice was sent to you regarding the meeting date.

Attached is a copy of the plan that will be considered by the City Council.

Many thanks to Kelley Gage and Tim Bombardier for the assistance they provided to me in the process of preparing Poway's plan.

If you have any questions or concerns, please reach me at 858.668.4707. Thank you!

Kristen Crane

Kristen Mignone Crane
Utilities Administrator
City of Poway
Public Works Department
858.668.4707

City of Poway offices are closed on alternating Fridays. For information, please visit poway.org/hours.

Kristen Crane

From: Kristen Crane
Sent: Monday, May 23, 2011 1:46 PM
To: 'rbailey@sandiego.gov'; 'asasaki@sandiego.gov'; 'msteirer@sandiego.gov';
'andersonw@sandiego.gov'
Subject: City of Poway - Administrative Draft - 2010 Urban Water Management Plan
Attachments: 2010 UWMP - Full Plan.pdf

At the June 7, 2011 meeting of the Poway City Council, there will be a public hearing for Council adoption of the City's 2010 Urban Water Management Plan.

As required by the California Water Code provisions related to public notice of Urban Water Management Plan revisions, a notification letter was sent to you in late-March indicating that the City of Poway would conduct a public hearing on its UWMP on June 7th.

Attached is Poway's 2010 Urban Water Management Plan as it will be presented to the City Council for consideration and adoption. As a neighboring jurisdiction and because of the wastewater and recycled water partnership between the City of San Diego and City of Poway, we feel it is appropriate to provide you with this administrative draft in advance.

Please contact me if you have any questions or concerns. Thank you!

Kristen Crane

Kristen Mignone Crane
Utilities Administrator
City of Poway
Public Works Department
858.668.4707

City of Poway offices are closed on alternating Fridays. For information, please visit poway.org/hours.

Kristen Crane

From: Kristen Crane
Sent: Monday, May 23, 2011 3:52 PM
To: 'eric.gibson@sdcounty.ca.gov'; 'devon.muto@sdcounty.ca.gov';
nelson.olivas@sdcounty.ca.gov; Glass, Laurel (Laurel.Glass@amec.com)
Subject: City of Poway - 2010 Urban Water Management Plan - Administrative Draft
Attachments: 2010 UWMP - Full Plan.pdf

At the June 7, 2011, Poway City Council meeting, there will be a public hearing for Council adoption of the City's 2010 Urban Water Management Plan. As a stakeholder, in March 2011, a notice was sent to the County of San Diego regarding the meeting date.

Attached is a copy of the plan that will be considered by the City Council.

If you have any questions or concerns, please reach me at 858.668.4707. Thank you!

Kristen Crane

Kristen Mignone Crane
Utilities Administrator
City of Poway
Public Works Department
858.668.4707

City of Poway offices are closed on alternating Fridays. For information, please visit poway.org/hours.

Kristen Crane

From: Kristen Crane
Sent: Monday, May 23, 2011 3:48 PM
To: 'ingrid.hansen@sdcounty.ca.gov'
Subject: City of Poway - 2010 Urban Water Management Plan - Administrative Draft
Attachments: 2010 UWMP - Full Plan.pdf

Ms. Hansen -

At the June 7, 2011, Poway City Council meeting, there will be a public hearing for Council adoption of the City's 2010 Urban Water Management Plan. As a stakeholder, in March 2011, a notice was sent to you regarding the meeting date.

Attached is a copy of the plan that will be considered by the City Council.

If you have any questions or concerns, please reach me at 858.668.4707. Thank you!

Kristen Crane

Kristen Mignone Crane
Utilities Administrator
City of Poway
Public Works Department
858.668.4707

City of Poway offices are closed on alternating Fridays. For information, please visit poway.org/hours.

Kristen Crane

From: Kristen Crane
Sent: Tuesday, May 31, 2011 7:48 AM
To: 'mst@sandag.org'
Subject: City of Poway - 2010 Urban Water Management Plan

Mr. Scruggs –

At the June 7, 2011 meeting of the Poway City Council, there will be a public hearing for Council adoption of the City's 2010 Urban Water Management Plan.

As required by the California Water Code provisions related to public notice of Urban Water Management Plan revisions, a notification letter was sent to you in late-March indicating that the City of Poway would conduct a public hearing on its UWMP on June 7th.

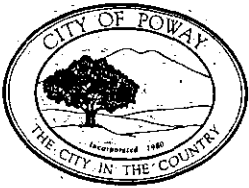
Here is a link to the [2010 Urban Water Management Plan](#), posted on the City's website under City Documents for easy access. This is the draft that the City Council will consider for adoption. I attempted twice to email this PDF to you early last week but received failure messages because the file size was too large.

Please contact me if you have any questions or concerns. Thank you!

Kristen Crane

Kristen Mignone Crane
Utilities Administrator
City of Poway
Public Works Department
858.668.4707

City of Poway offices are closed on alternating Fridays. For information, please visit poway.org/hours.



City of Poway COUNCIL AGENDA REPORT

APPROVED	<input checked="" type="checkbox"/>
APPROVED AS AMENDED	<input type="checkbox"/>
(SEE MINUTES)	
DENIED	<input type="checkbox"/>
REMOVED	<input type="checkbox"/>
CONTINUED	
RESOLUTION NO. <u>11-030</u>	

DATE: June 7, 2011

TO: Honorable Mayor and Members of the City Council

FROM: Penny Riley, City Manager *[Signature]*

INITIATED BY: Leah Browder, Director of Public Works *[Signature]*
Kristen Mignone Crane, Utilities Administrator *[Signature]*

SUBJECT: Resolution Adopting the City of Poway's 2010 Urban Water Management Plan and Rescinding Resolution No. 05-096

Summary:

As an urban water supplier with more than 3,000 service connections, the City of Poway is required by the State of California Water Code to adopt an Urban Water Management Plan (UWMP) for submittal to the California Department of Water Resources (DWR) for review and approval. The 2010 plan must be adopted by the City Council by July 1, 2011.

Recommended Action:

It is recommended that the City Council take public input, close the public hearing, adopt the attached Resolution Adopting the 2010 Urban Water Management Plan and rescind Resolution No. 05-096.

Background:

State of California Urban Water Management Plan Requirements

The State of California Water Code requires all urban water suppliers in the state to prepare an Urban Water Management Plan (UWMP) every five years. The UWMP must report, describe, and evaluate water deliveries and uses, water supply sources, efficient water uses, and demand management measures.

State laws governing UWMPs are specific about what topics the plans must address, including long-term resource planning to ensure adequate water supplies are available to meet existing and projected demands. Urban water suppliers are required to address a 25-year planning horizon and consider various drought and water shortage scenarios. Water shortage contingency planning and drought response actions must be specifically stated in the UWMP.

Water suppliers must also report base daily per capita water use (baseline), establish an urban water use target for 2020, an interim water use target for 2015, and compliance daily per capita water use.

Preparation of the 2010 City of Poway Urban Water Management Plan

Preparing the UWMP requires coordination with the San Diego County Water Authority (SDCWA). As a wholesale water supplier, SDCWA is also required to submit a UWMP, with data rolling-up from each of its 24 member agencies. Since Poway purchases nearly its entire water supply from SDCWA, Poway's plan references the SDCWA plan in many aspects (especially concerning reliability and prolonged supply shortages).

The City of Poway's 2010 UWMP is based on several key assumptions: 1) the City will strive to meet the 20% x 2020 water use efficiency requirement and will build on water efficiency already realized in the community; 2) the City of Poway will continue to purchase its potable water supply from SDCWA; 3) the City of Poway will not independently complete any water supply expansion projects; 4) there will be slow development in all water use sectors; and 5) no commitment for major expansion of the recycled water system.

Compliance with 20% x 2020

The 2010 UWMP requires calculating the City's 2020 water use efficiency target using one of four methods provided by DWR. Before choosing a target calculation method, a water agency must calculate gallon per capita per day (GPCD) water use within a prescribed range of 10-year periods. The 10-year period with the highest water usage serves as the baseline period. For Poway, the highest 10-year period was 1999-2008. Average water use for this period was 269 GPCD. Staff then assessed the four methods to determine which method is most efficient for Poway and chose Method 1. A 20% reduction equates to a 2020 target of 215 GPCD.

While in many ways 2010 is considered an anomaly (mild summer temperatures, high rainfall, five-block rate structure, irrigation restrictions), the City of Poway's 2010 GPCD was 171 GPCD (well below its 2020 target). However, there is uncertainty surrounding how water use patterns might change as drought restrictions are lifted, the economy recovers, and dry weather patterns re-emerge.

The chart below compares Poway's GPCD rates for the past few years against the projections for the future, assuming the City will maintain water efficiency success achieved to date and achieve its 20% x 2020 target (215 GPCD).

Historic						Projected				
Year	2006	2007	2008	2009	2010	2015	2020	2025	2030	2035
GPCD	282	278	249	204	171	215	215	215	215	215
Total (AF)	15,873	15,679	14,150	11,645	9,913	12,526	12,954	13,355	13,886	14,007

Findings:

Implementation Plan

Within their UWMPs, water agencies are required to identify strategies for achieving and maintaining the 20% x 2020 target. Should Poway water use patterns trend upward, strategies for consideration to reduce water use as necessary are summarized in Section 3.5 of the 2010 UWMP.

Economic Impact

The State of California requires that water agencies consider the economic impacts associated with achieving and maintaining compliance with the 20% x 2020 water use efficiency requirement. While the exact economic impact is unknown and was not analyzed as part of the preparation of the 2010 UWMP, potential economic impacts are discussed below.

- Water efficiency is the least expensive source of new water. Programs and projects that reduce existing water use support avoidance of capital costs necessary to expand water infrastructure to meet growing demands and are less expensive than projects that create "new" water, like desalination of ocean water or expanding treatment and reuse of wastewater.
- Maximizing water efficiency reduces our region's dependence on imported water, lessening the energy demand and associated costs to transport the water several hundred miles over steep topography.
- Reduced dependence on water supplies from Northern California could impact the future conveyance facility of water through or around the Sacramento-San Joaquin River Delta. Though the fate of that project is extremely uncertain, should the project proceed, construction costs for the \$50 billion peripheral canal would likely be borne by Southern California water customers.
- Indications from the Metropolitan Water District and SDCWA are that water rates are expected to continue increasing over the next ten years. While variable costs (raw water, chemicals) decrease with reduced water use, fixed costs for capital infrastructure, customer service, and system maintenance remain consistent. This affects retail water rates.
- Costs of capital projects and programs to achieve compliance with 20% x 2020. Should the City's water use return to pre-2008 levels, the City would need to consider projects to lower overall water use. For example, if the City were to consider expanding the recycled water system, converting high water using landscapes to more water-efficient designs, expanding public education or offering rebate programs for water-efficient appliances or irrigation equipment, those programs would have a cost which would have to be passed on to the rate payers.
- To avoid steep water use increases, Poway might consider increasing water-efficiency requirements for new homes and businesses. For example, new commercial or industrial properties might be required to incorporate more progressive water-efficiency practices into

their development to reduce net GPCD water use. While such requirements would help the City reach its 20% x 2020 target, they might deter new businesses.

Fiscal Impact:

There is no direct fiscal impact associated with adoption of the 2010 Urban Water Management Plan.

Environmental Review:

None

Public Notification:

The State of California requires that water agencies notify key stakeholders sixty days in advance that the agency will be conducting a public hearing to amend its UWMP. As required, notification letters were sent in March 2011 to SDCWA, the City of San Diego, the County of San Diego, the San Diego Association of Governments, and the San Diego County Local Agency Formation Commission.

Additionally, the State of California requires that the City Council conduct a public hearing to consider adoption of the 2010 UWMP. As required for a public hearing, this item was noticed in the *Poway News Chieftain* on May 25, 2011. Notification letters were resent to the agencies listed above, with an electronic copy of the City's 2010 UWMP.

Attachment:

- A. Proposed Resolution
- B. City of Poway's 2010 Urban Water Management Plan (The entire package is available for review at the Office of the City Clerk.)

RESOLUTION NO. 11-___

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF POWAY, CALIFORNIA,
ADOPTING THE CITY OF POWAY'S
2010 URBAN WATER MANAGEMENT PLAN
AND RESCINDING RESOLUTION NO. 05-096

WHEREAS, the California legislature enacted Assembly Bill 797 (Water Code Section 1060 et seq., known as the Urban Water Management Planning Act) during the 1983-84 Regular Session (and as amended subsequently), which mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, prepare an Urban Water Management Plan, the primary objective of which is to plan for the conservation and efficient use of water; and

WHEREAS, the City is an urban supplier of water to approximately 13,946 customer accounts at this time; and

WHEREAS, the Urban Water Management Planning Act requires that the Plan be periodically reviewed at least once every five years, and that the City make any amendments or changes to its Plan which are indicated by the review; and

WHEREAS, the Plan is required to be adopted by July 1, 2011, after public review and hearing, and must be filed with the California Department of Water Resources within thirty days of adoption; and

WHEREAS, the City has prepared and made available for review a 2010 Urban Water Management Plan, as on file at the City Clerk's Office, and properly noticed a public hearing held by the Poway City Council regarding said Plan on June 7, 2011.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Poway as follows:

Section 1. The City of Poway's 2010 Urban Water Management Plan is hereby approved and adopted.

Section 2. The City Clerk is hereby authorized and directed to file the 2010 Urban Water Management Plan with the California Department of Water Resources and the California State Library within 30 days after this date.

Section 3. The City Manager is hereby authorized and directed to implement the water efficiency programs as set forth in the 2010 Urban Water Management Plan, which includes water shortage contingency analysis and implementation of best management practices to carry out effective and equitable water conservation and water recycling programs.

Section 4. Resolution No. 05-096 is hereby rescinded.

PASSED, ADOPTED AND APPROVED by the City Council of the City of Poway, California, at a regular meeting this 7th day of June, 2011.

Don Higginson, Mayor

ATTEST:

Linda A. Troyan, MMC, City Clerk

STATE OF CALIFORNIA)
)SS
COUNTY OF SAN DIEGO)

I, Linda A. Troyan, MMC, City Clerk of the City of Poway, do hereby certify under penalty of perjury that the foregoing Resolution No. 11-__ was duly adopted by the City Council at a meeting of said City Council held on the 7th day of June, 2011, and that it was so adopted by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

Linda A. Troyan, MMC, City Clerk
City of Poway



City of Poway

2010 Urban Water Management Plan

June 7, 2011

ATTACHMENT B

Full document available in the Office of the City Clerk

June 7, 2011, Item # 3.1

RESOLUTION NO. 11-030

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF POWAY, CALIFORNIA,
ADOPTING THE CITY OF POWAY'S
2010 URBAN WATER MANAGEMENT PLAN
AND RESCINDING RESOLUTION NO. 05-096

WHEREAS, the California legislature enacted Assembly Bill 797 (Water Code Section 1060 et seq., known as the Urban Water Management Planning Act) during the 1983-84 Regular Session (and as amended subsequently), which mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, prepare an Urban Water Management Plan, the primary objective of which is to plan for the conservation and efficient use of water; and

WHEREAS, the City is an urban supplier of water to approximately 13,946 customer accounts at this time; and

WHEREAS, the Urban Water Management Planning Act requires that the Plan be periodically reviewed at least once every five years, and that the City make any amendments or changes to its Plan which are indicated by the review; and

WHEREAS, the Plan is required to be adopted by July 1, 2011, after public review and hearing, and must be filed with the California Department of Water Resources within thirty days of adoption; and

WHEREAS, the City has prepared and made available for review a 2010 Urban Water Management Plan, as on file at the City Clerk's Office, and properly noticed a public hearing held by the Poway City Council regarding said Plan on June 7, 2011.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Poway as follows:

Section 1. The City of Poway's 2010 Urban Water Management Plan is hereby approved and adopted.

Section 2. The City Clerk is hereby authorized and directed to file the 2010 Urban Water Management Plan with the California Department of Water Resources and the California State Library within 30 days after this date.

Section 3. The City Manager is hereby authorized and directed to implement the water efficiency programs as set forth in the 2010 Urban Water Management Plan, which includes water shortage contingency analysis and implementation of best management practices to carry out effective and equitable water conservation and water recycling programs.

Section 4. Resolution No. 05-096 is hereby rescinded.

PASSED, ADOPTED AND APPROVED by the City Council of the City of Poway, California, at a regular meeting this 7th day of June, 2011.

Don Higginson, Mayor

ATTEST:

~~Linda A. Troyan, MMC, City Clerk~~

STATE OF CALIFORNIA)
)SS
COUNTY OF SAN DIEGO)

I, Linda A. Troyan, MMC, City Clerk of the City of Poway, do hereby certify under penalty of perjury that the foregoing Resolution No. 11-030 was duly adopted by the City Council at a meeting of said City Council held on the 7th day of June, 2011, and that it was so adopted by the following vote:

AYES: BOYACK, GROSCH, MULLIN, CUNNINGHAM, HIGGINSON

NOES: NONE

ABSENT: NONE

DISQUALIFIED: NONE

Linda A. Troyan, MMC, City Clerk
City of Poway

**DEPARTMENT OF WATER RESOURCES
2010 URBAN WATER MANAGEMENT PLAN CHECKLIST**

Table I-2 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
PLAN PREPARATION				
4	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	10620(d)(2)		Section 1.2
6	Notify, at least 60 days prior to the public hearing on the plan required by Section 10642, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Any city or county receiving the notice may be consulted and provide comments.	10621(b)	Letters provided in Appendix B	Section 1.2 Appendix C
7	Provide supporting documentation that the UWMP or any amendments to, or changes in, have been adopted as described in Section 10640 et seq.	10621(c)	Resolution attached	Section 1.3 Appendix C
54	Provide supporting documentation that the urban water management plan has been or will be provided to any city or county within which it provides water, no later than 60 days after the submission of this urban water management plan.	10635(b)		Section 1.3
55	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	10642	Public hearing occurred at a City Council meeting, open to the public.	Section 1.3
56	Provide supporting documentation that the urban water supplier made the plan available for public inspection and held a public hearing about the plan. For public agencies, the hearing notice is to be provided pursuant to Section 6066 of the Government Code. The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water. Privately-owned water suppliers shall provide an equivalent notice within its service area.	10642	Public hearing notice included in Appendix B.	Section 1.3 Appendix C
57	Provide supporting documentation that the plan has been adopted as prepared or modified.	10642	Resolution in Appendix D	Section 1.3 Appendix C

City of Poway
2010 Urban Water Management Plan

APPENDIX D

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
58	Provide supporting documentation as to how the water supplier plans to implement its plan.	10643	City Council meeting agenda report	Appendix C
59	Provide supporting documentation that, in addition to submittal to DWR, the urban water supplier has submitted this UWMP to the California State Library and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. This also includes amendments or changes.	10644(a)		Section 1.3
60	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the urban water supplier has or will make the plan available for public review during normal business hours	10645	Available at Poway City Hall or on the City's web site (poway.org)	Section 1.3
SYSTEM DESCRIPTION				
8	Describe the water supplier service area.	10631(a)		Section 2.2
9	Describe the climate and other demographic factors of the service area of the supplier	10631(a)		Section 2.3
10	Indicate the current population of the service area	10631(a)	Provide the most recent population data possible. Use the method described in "Baseline Daily Per Capita Water Use." See Section M.	Section 2.4
11	Provide population projections for 2015, 2020, 2025, and 2030, based on data from State, regional, or local service area population projections.	10631(a)	2035 and 2040 can also be provided to support consistency with Water Supply Assessments and Written Verification of Water Supply documents.	Section 2.4 Table 2
12	Describe other demographic factors affecting the supplier's water management planning.	10631(a)		Section 2.5
SYSTEM DEMANDS				
1	Provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	10608.20(e)		Sections 3.1, 3.3

City of Poway
2010 Urban Water Management Plan

APPENDIX D

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
2	<i>Wholesalers:</i> Include an assessment of present and proposed future measures, programs, and policies to help achieve the water use reductions. <i>Retailers:</i> Conduct at least one public hearing that includes general discussion of the urban retail water supplier's implementation plan for complying with the Water Conservation Bill of 2009.	10608.36 10608.26(a)	Retailers and wholesalers have slightly different requirements	Not Applicable
3	Report progress in meeting urban water use targets using the standardized form.	10608.40		Section 3.3 Tables 5-7
25	Quantify past, current, and projected water use, identifying the uses among water use sectors, for the following: (A) single-family residential, (B) multifamily, (C) commercial, (D) industrial, (E) institutional and governmental, (F) landscape, (G) sales to other agencies, (H) saline water intrusion barriers, groundwater recharge, conjunctive use, and (I) agriculture.	10631(e)(1)	Consider 'past' to be 2005, present to be 2010, and projected to be 2015, 2020, 2025, and 2030. Provide numbers for each category for each of these years.	Sections 3.2.1, 3.3.1 Tables 3 and 4 Tables 5-7
33	Provide documentation that either the retail agency provided the wholesale agency with water use projections for at least 20 years, if the UWMP agency is a retail agency, OR, if a wholesale agency, it provided its urban retail customers with future planned and existing water source available to it from the wholesale agency during the required water-year types	10631(k)	Average year, single dry year, multiple dry years for 2015, 2020, 2025, and 2030.	Section 4.1.2 Table 16
34	Include projected water use for single-family and multifamily residential housing needed for lower income households, as identified in the housing element of any city, county, or city and county in the service area of the supplier.	10631.1(a)		Section 3.3.1 Table 8
SYSTEM SUPPLIES				
13	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, and 2030.	10631(b)	The 'existing' water sources should be for the same year as the "current population" in line 10. 2035 and 2040 can also be provided.	Sections 4.1, 4.2
14	Indicate whether groundwater is an existing or planned source of water available to the supplier. If yes, then complete 15 through 21 of the UWMP Checklist. If no, then indicate "not applicable" in lines 15 through 21 under the UWMP location column.	10631(b)	Source classifications are: surface water, groundwater, recycled water, storm water, desalinated sea water, desalinated brackish groundwater, and other.	Section 4.2

City of Poway
2010 Urban Water Management Plan

APPENDIX D

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
15	Indicate whether a groundwater management plan been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	10631(b)(1)		Not Applicable
16	Describe the groundwater basin.	10631(b)(2)		Not Applicable
17	Indicate whether the groundwater basin is adjudicated? Include a copy of the court order or decree.	10631(b)(2)		Not Applicable
18	Describe the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. If the basin is not adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		Not Applicable
19	For groundwater basins that are not adjudicated, provide information as to whether DWR has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition. If the basin is adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		Not Applicable
20	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	10631(b)(3)		Not Applicable
21	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	10631(b)(4)	Provide projections for 2015, 2020, 2025, and 2030.	Not Applicable
24	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	10631(d)		Section 4.3
30	Include a detailed description of all water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years, excluding demand management programs addressed in (f)(1). Include specific projects, describe water supply impacts, and provide a timeline for each project.	10631(h)		Sections 3.4, 3.5, 4.1.1, 4.5
31	Describe desalinated water project opportunities for long-term supply, including, but not limited to, ocean water, brackish water, and groundwater.	10631(i)		Section 4.4
44	Provide information on recycled water and its potential for use as a water source in the service area of the urban water supplier. Coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	10633		Section 4.5

City of Poway
2010 Urban Water Management Plan

APPENDIX D

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
45	Describe the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	10633(a)		Section 4.5.3
46	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	10633(b)		Section 4.5.3 Tables 21, 22
47	Describe the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.	10633(c)		Section 4.5.4
48	Describe and quantify the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.	10633(d)		Section 4.5.5 Table 23
49	The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	10633(e)		Section 4.5.5 Table 23
50	Describe the actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.	10633(f)		Section 4.5.5 Table 25
51	Provide a plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.	10633(g)		Section 4.5.5
WATER SHORTAGE RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING ^b				
5	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	10620(f)		Section 5.2
22	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage and provide data for (A) an average water year, (B) a single dry water year, and (C) multiple dry water years.	10631(c)(1)		Sections 3.4, 5.5.5
23	For any water source that may not be available at a consistent level of use - given specific legal, environmental, water quality, or climatic factors - describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.	10631(c)(2)		Section 5.2

City of Poway
2010 Urban Water Management Plan

APPENDIX D

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
35	Provide an urban water shortage contingency analysis that specifies stages of action, including up to a 50-percent water supply reduction, and an outline of specific water supply conditions at each stage	10632(a)		Section 5.3
36	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.	10632(b)		Section 5.5.3
37	Identify actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.	10632(c)		Sections 5.3.2
38	Identify additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.	10632(d)		Section 5.3.4 Table 36
39	Specify consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.	10632(e)		Section 5.3.4 Table 37
40	Indicated penalties or charges for excessive use, where applicable.	10632(f)		Section 5.3.5
41	Provide an analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.	10632(g)		Section 5.3.6
42	Provide a draft water shortage contingency resolution or ordinance.	10632(h)		Appendix F
43	Indicate a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.	10632(i)		Sections 5.5, 5.5.5
52	Provide information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments, and the manner in which water quality affects water management strategies and supply reliability	10634	For years 2010, 2015, 2020, 2025, and 2030	Section 5.4

City of Poway
2010 Urban Water Management Plan

APPENDIX D

No.	UWMP requirement ^a	Calif. Water Code reference	Additional clarification	UWMP location
53	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. Base the assessment on the information compiled under Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.	10635(a)		Sections 3.4, 5.5, 5.5.5
DEMAND MANAGEMENT MEASURES				
26	Describe how each water demand management measures is being implemented or scheduled for implementation. Use the list provided.	10631(f)(1)	Discuss each DMM, even if it is not currently or planned for implementation. Provide any appropriate schedules.	Sections 6, 6.1
27	Describe the methods the supplier uses to evaluate the effectiveness of DMMs implemented or described in the UWMP.	10631(f)(3)		Section 6.2
28	Provide an estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the ability to further reduce demand.	10631(f)(4)		Section 6.3
29	Evaluate each water demand management measure that is not currently being implemented or scheduled for implementation. The evaluation should include economic and non-economic factors, cost-benefit analysis, available funding, and the water suppliers' legal authority to implement the work.	10631(g)	See 10631(g) for additional wording.	Section 6.1
32	Include the annual reports submitted to meet the Section 6.2 requirements, if a member of the CUWCC and signer of the December 10, 2008 MOU.	10631(j)	Signers of the MOU that submit the annual reports are deemed compliant with Items 28 and 29.	Appendix G

a The UWMP Requirement descriptions are general summaries of what is provided in the legislation. Urban water suppliers should review the exact legislative wording prior to submitting its UWMP.

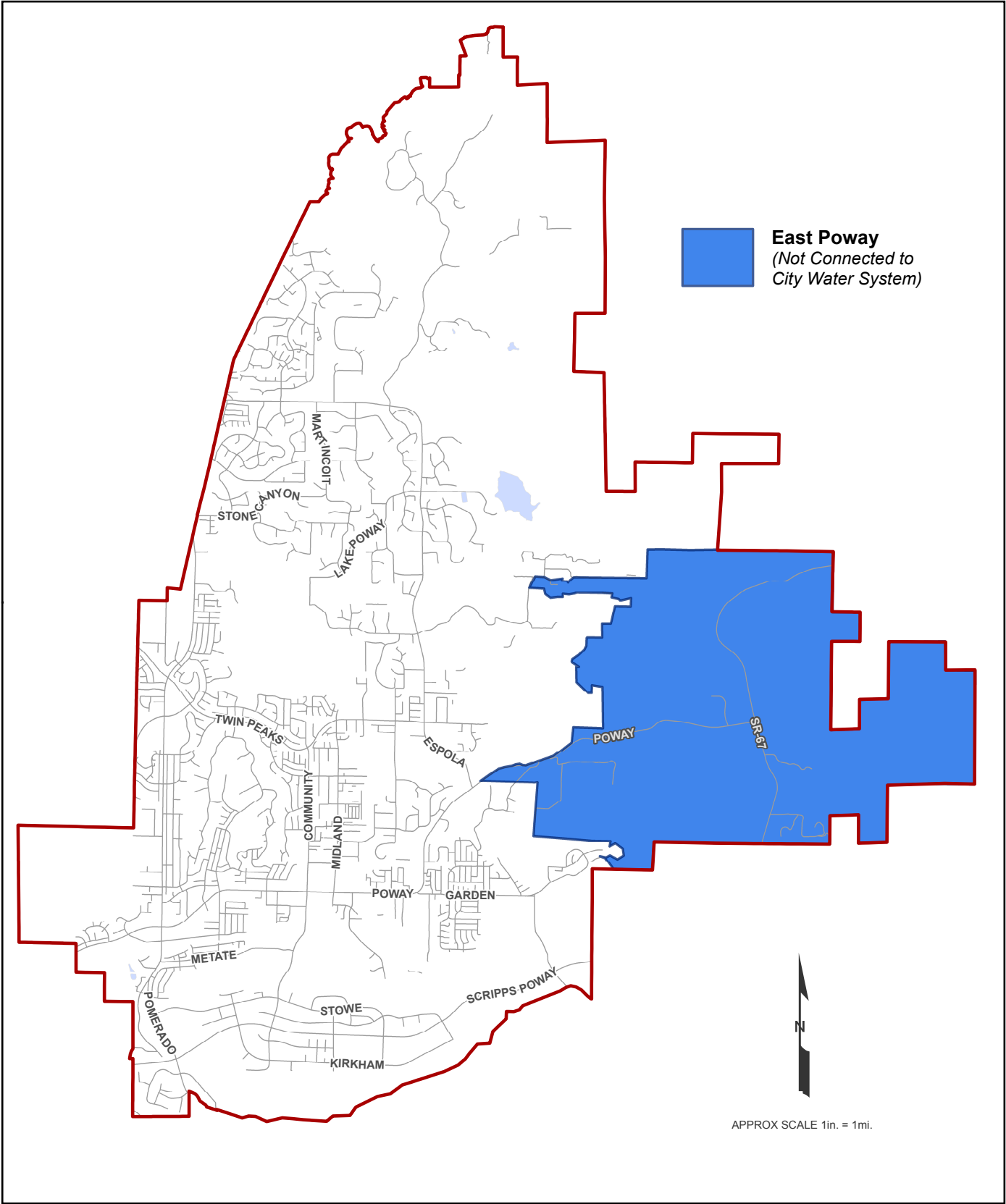
b The Subject classification is provided for clarification only. It is aligned with the organization presented in Part I of this guidebook. A water supplier is free to address the UWMP Requirement anywhere with its UWMP, but is urged to provide clarification to DWR to facilitate review.

MAP OF POWAY



CITY OF POWAY

2010 Urban Water Management Plan



This map provided without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. This map has been prepared for descriptive purposes only and its accuracy cannot be guaranteed. Last revised 4/28/2011.

**POWAY MUNICIPAL CODE – CHAPTER 8.94
WATER CONSERVATION PLAN**

Chapter 8.94 WATER CONSERVATION PLAN

Sections:

- 8.94.010 Declaration of necessity and intent.
- 8.94.020 Definitions.
- 8.94.030 Application.
- 8.94.040 Water use efficiency measures.
- 8.94.050 Conservation levels.
- 8.94.060 City-maintained parks, landscaped areas, and facilities.
- 8.94.065 Poway Unified School District-maintained landscaped areas and facilities.
- 8.94.070 Golf courses.
- 8.94.080 Commercial growers and nurseries.
- 8.94.090 Correlation between Drought Management Plan and water shortage response levels.
- 8.94.100 New landscaping and postponement of required landscaping.
- 8.94.110 Hardship variance.
- 8.94.120 Appeals.
- 8.94.130 Supersedure.
- 8.94.140 Enforcement.

8.94.010 Declaration of necessity and intent.

A. This chapter establishes water management requirements necessary to conserve water, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, prevent unreasonable use of water, prevent unreasonable methods of use of water within the City of Poway in order to assure adequate supplies of water to meet the needs of the public, and further the public health, safety, and welfare, recognizing that water is a scarce natural resource that requires careful management not only in times of drought, but at all times.

B. This chapter establishes water use efficiency measures applicable to all persons or businesses using City of Poway water at all times to increase water efficiency.

C. This chapter establishes regulations to be implemented during times of declared water shortages, or declared water shortage emergencies. It establishes four levels of water conservation actions to be implemented in times of shortage, with increasing restrictions on water use in response to worsening water supply conditions and decreasing available supplies.

D. Level 1 water conservation measures are voluntary and will be reinforced through local and regional public education and awareness measures. During water conservation Levels 2 through 4, conservation measures and water use restrictions are mandatory and become increasingly restrictive in order to attain escalating conservation goals. Violations may be subject to criminal, civil, and administrative penalties and remedies specified in this chapter and as provided in the Poway Municipal Code. (Ord. 682 § 1, 2008)

8.94.020 Definitions.

As used in this chapter:

A. "Active park and school ground areas" means those areas designated by public agencies and private schools for specific sporting and recreational activities and areas traditionally used for active play or recreation, where turf is an integral part of the activity. All other turf areas shall be considered ornamental.

B. "Agency" means the City of Poway.

C. "City Manager" means the City of Poway City Manager or the City Manager's designee.

D. "Devices" shall mean any method utilized to conserve potable or reclaimed water supplies or to offset existing potable or reclaimed water supplies.

E. "DMP" means the Water Authority's Drought Management Plan in existence on the effective date of the ordinance codified in this chapter and as readopted or amended from time to time, or an equivalent plan of the Water Authority to manage or allocate supplies during shortages.

F. "Fire protection" means actions for prevention or suppression of fires as directed by the Fire Marshal or fire prevention officer with jurisdiction over the local area involved.

G. "Golf courses" means the ground or course over which golf is played for commercial recreational use. A standard full-scale golf course encompasses 125 to 175 acres, usually with 18 holes varying from 100 to 650 yards in length from tee to cup. Shall also be defined to include areas owned by the same entity associated with the golf course for practice, ornamentation, recreation, and/or hospitality, including structures.

H. "Greywater" means household water other than toilet water, including, but not limited to, water from the laundry, shower, tub, bathroom, and kitchen sinks. The exception mentioned for greywater depends solely upon approval of such use by the San Diego County Department of Health Services.

I. "Grower" refers to persons engaged in the growing or raising, in conformity with recognized practices of husbandry, for the purpose of commerce, trade, or industry, or for use by public educational or correctional institutions, of agricultural, horticultural or floricultural products, and pro-

duced (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, or (3) for the feeding of fowl or livestock for the purpose of obtaining their products for human consumption or for the market. "Grower" does not refer to customers who purchase water subject to the Metropolitan Interim Agricultural Water Program or the Water Authority Special Agricultural Rate programs.

J. "Metropolitan" means the Metropolitan Water District of Southern California.

K. "Micro-irrigation systems/equipment" means low-pressure, low-volume methods of water application. These devices include drip emitters, T-tape, microsprayers, a-jets, mini-sprinklers, twirlers, and spaghetti tubing. Pop-up sprinklers are not considered low-volume, low-pressure irrigation systems/equipment.

L. "Person" means any natural person, corporation, public or private entity, public or private association, public or private agency, government agency or institution, school district, college, university, or any other user of water provided by the City of Poway.

M. "Potable water" means water delivered by the City, which meets drinking water standards, or raw water delivered by the San Diego County Water Authority.

N. "Reclaimed water" means water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or controlled use that would not otherwise occur.

O. "Recreational and ornamental lakes and ponds" means bodies of water which are not swimming pools or water storage reservoirs for potable water or irrigation purposes.

P. "Water Authority" means the San Diego County Water Authority.

Q. "Water used for agriculture" means water used to irrigate an agricultural crop or trees. (Ord. 682 § 1, 2008)

8.94.030 Application.

A. The provisions of this chapter apply to any person using any water, other than reclaimed water, provided by the City of Poway.

B. This chapter is intended solely to further the conservation of water. It is not intended to implement any provision of Federal, State, or local statutes, ordinances, or regulations relating to protection of water quality or control of drainage or runoff.

C. Nothing in this chapter is intended to affect or limit the ability of the City of Poway to declare and respond to an emergency, including an emergency that affects the ability of the City of Poway to supply water.

D. In the event of a local water supply emergency, for reasons that may or may not be related to the San Diego County Water Authority and/or its Drought Management Plan, the City Manager, acting as Director of Emergency Services, may immediately declare the appropriate water shortage response level pursuant to his or her powers under PMC 2.12.060, to be confirmed by the City Council at the earliest practical time.

E. The provisions of this chapter do not apply to use of water from private wells or to reclaimed water.

F. Nothing in this chapter shall apply to use of water that is subject to a special supply program, such as the Metropolitan Interim Agricultural Water Program or the Water Authority Special Agricultural Rate programs. Violations of the conditions of special supply programs are subject to the penalties established under the applicable program. A person using water subject to a special supply program and other water provided by

the City of Poway is subject to this chapter in the use of the water that is not subject to the special supply program. (Ord. 682 § 1, 2008)

8.94.040 Water use efficiency measures.

A. No water customer of the City of Poway shall knowingly make, cause, use or permit the use of water from the City for residential, commercial, industrial, agricultural, governmental or any other purpose in a manner contrary to any provision of this chapter, or in an amount in excess of that use permitted by the conservation stages hereinafter designated, which are in effect pursuant to action taken by the City Manager in accordance with the provisions of this chapter.

B. Good water management practices dictate that water be used wisely and not wasted at any time. The following water use efficiency measures apply on a voluntary basis at all times, apply on a mandatory basis during a Water Shortage Level 1 based upon separate action of the City Council; and apply on a mandatory basis automatically during a Water Shortage Level 2, 3, or 4:

1. Do not wash down paved surfaces, including but not limited to sidewalks, driveways, parking lots, tennis courts, or patios, except when necessary to alleviate safety or sanitation hazards.
2. Do not allow water waste from inefficient landscape irrigation, such as runoff, low head drainage, or overspray and do not allow water flows onto nontargeted areas, such as adjacent property, nonirrigated areas, hardscapes, roadways, or structures.
3. Irrigate residential and commercial landscape before 10:00 a.m. and after 6:00 p.m. only.
4. Use only a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas, including trees and shrubs located on residential and commercial properties that are not irrigated by a landscape irrigation system.
5. Irrigate nursery and commercial grower's products before 10:00 a.m. and after 6:00 p.m. only. Watering is permitted at any time using a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Water for livestock is permitted at any time.
6. Use only recirculated water to operate ornamental fountains.
7. Wash vehicles only using a bucket and a hand-held hose with positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that recirculates (reclaims) water on site. Do not wash vehicles during hot conditions when additional water is required due to evaporation.
8. Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.

9. Do not use single-pass cooling equipment in new commercial applications, including, but not limited to, air conditioners, air compressors, vacuum pumps, and ice machines.
10. Use a water recirculation system for commercial conveyor car washes and all new commercial laundry systems.
11. Run only fully loaded dishwashers and washing machines.
12. Repair all water leaks within five days of notification by the City of Poway, unless other arrangements are made with the City Manager.
13. Use recycled or nonpotable water for construction purposes to the fullest extent possible when available. (Ord. 682 § 1, 2008)

8.94.050 Conservation levels.**A. Level 1 – Water Shortage Watch.**

1. Activation. A Water Shortage Response Level 1 condition is also referred to as a “Water Shortage Watch” condition. A Level 1 condition applies when the Water Authority notifies its member agencies that, due to drought or other supply reductions, there is a reasonable probability there will be supply shortages and that a consumer demand reduction of up to 10 percent is required in order to ensure that sufficient supplies will be available to meet anticipated demands.
2. Procedure. A Water Shortage Response Level 1 condition may be declared by the City Manager upon a written determination of the existence of facts and circumstances supporting the determination. A copy of the written determination shall be filed with the City Clerk and provided to the City Council. The City Manager shall publish a notice of the determination of the existence of the Water Shortage Response Level 1 condition in one or more newspapers, including a newspaper of general circulation used for publication of official notices. The City of Poway may also post notice of condition on its website.

During a Level 1 Water Shortage Watch condition, the City of Poway will increase its public education and outreach efforts to:

- a. Ask customers to voluntarily reduce water use by 10 percent.
- b. Inform customers of the water use efficiency measures listed in PMC 8.94.040.
- c. Encourage customers to utilize the water conservation incentives and programs offered by the City of Poway and its suppliers.

During a Level 1 Water Shortage Watch condition, the water use efficiency measures identified in PMC 8.94.040 may become mandatory upon separate action of the City Council and are subject to the enforcement provisions identified in Chapters 1.08 and 1.10 PMC, and PMC 8.94.140.

The City Council may declare an end to a water shortage response level by adoption of a resolution at any regular or special meeting held in accordance with State law.

3. Water Use Restrictions. During a Level 1 Water Shortage Watch condition, in addition to the measures listed in PMC 8.94.040, the following measures are applicable on a voluntary basis to increase water use efficiency, unless made mandatory by action of the City Council:

- a. Reset irrigation clocks as necessary to water once per week in winter, and not more than three times per week in summer.
- b. Add water to maintain the level of water in swimming pools and spas only when necessary (to ensure proper operation of the pool filter). A cover shall be installed on all single-family residential pools and spas.
- c. Serve and refill water in restaurants and other food service establishments only upon request.

B. Level 2 – Water Shortage Alert.

1. Activation. A Water Shortage Level 2 condition is also referred to as a “Water Shortage Alert” condition. A Level 2 condition applies when the Water Authority notifies its member agencies that due to cutbacks caused by drought or other reduction in supplies, a consumer demand reduction of up to 20 percent is required in order to have sufficient supplies available to meet anticipated demands.

2. Procedure. The City Manager may declare a Water Shortage Response Level 2 and implement the mandatory Level 2 conservation measures identified in this chapter, with ratification by the City Council by resolution at their next regularly scheduled City Council meeting held in accordance with State law. The mandatory conservation measures applicable to a Water Shortage Response Level 2 condition shall take effect on the tenth day after the date the response level is declared, or upon an identified date thereafter. Within five days following the declaration of the response level, the City shall publish a copy of the resolution in a newspaper of general circulation used for publication of official notices. The City of Poway may also post notice of condition on its website.

The City Council may declare an end to a water shortage response level by adoption of a resolution at any regular or special meeting held in accordance with State law.

3. Water Use Restrictions. During a Level 2 Water Shortage Alert, the water use efficiency measures identified in PMC 8.94.040 and at Level 1 Water Shortage Watch are mandatory for all persons using City of Poway water in addition to the following mandatory conservation measures:

- a. Landscape watering shall be conducted only in conformance with landscape watering schedules and restrictions for commercial and residential

properties approved by the City Manager. The watering schedule and restrictions may address factors such as how many days during the week, which days of the week, the amount of time per watering station, and other pertinent details. Watering of landscaped areas that are not irrigated by a landscape irrigation system shall be subject to the same watering schedule and restrictions, using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation.

b. All leaks shall be repaired within 72 hours of notification by the City of Poway, unless other arrangements are made with the City Manager.

c. If the mandatory reduction level is less than 15 percent, ornamental fountains or similar decorative water features shall not be operated for more than six hours per day. If the mandatory reduction level is more than 15 percent, ornamental fountains shall not be operated unless reclaimed water is used.

d. If the mandatory reduction level is less than 15 percent, pool covers shall be encouraged but not required. If the mandatory reduction level is more than 15 percent, pool covers shall be required.

4. Allocation. During a Level 2 Water Shortage Alert, the City of Poway is authorized by action of the City Council to establish a water allocation for property receiving water service from the City of Poway, and to establish a penalty for any person that uses water in excess of their allocation.

5. Rate Structure. During a Water Shortage Response Level 2 condition, in addition to water use restrictions, the City is authorized by action of the City Council to implement a conservation rate structure designed to encourage water conservation. This rate structure may also include penalties to be used during periods of water allocation.

C. Level 3 – Water Shortage Critical.

1. Activation. A Water Shortage Level 3 condition is also referred to as a “Water Shortage Critical” condition. A Level 3 condition applies when the Water Authority notifies its member agencies that due to increasing cutbacks caused by drought or other reduction of supplies, a consumer demand reduction of up to 40 percent is required in order to have sufficient supplies available to meet anticipated demands.

2. Procedure. The City Manager may declare a Water Shortage Response Level 3 and implement the mandatory Level 3 conservation measures identified in this chapter, with ratification by the City Council by resolution at their next regularly scheduled City Council meeting held in accordance with State law. The mandatory conservation measures applicable to a Water Shortage Response Level 3 condition shall take effect on the tenth day after the date the response level is declared, or upon an identified date thereafter. Within five days following the declaration of the response level, the City shall publish a copy of the

resolution in a newspaper of general circulation used for publication of official notices. The City of Poway may also post notice of condition on its website.

The City Council may declare an end to a water shortage response level by adoption of a resolution at any regular or special meeting held in accordance with State law.

3. Water Use Restrictions. All persons using City of Poway water shall comply with Level 1 Water Shortage Watch and Level 2 Water Shortage Alert water conservation practices during a Level 3 Water Shortage Critical condition and shall also comply with the following additional mandatory conservation measures:

a. Landscape watering shall be conducted only in conformance with landscape watering schedules and restrictions for commercial and residential properties approved by the City Manager, which may be further restricted from the Level 1 requirements. The watering schedule and restrictions may address factors such as how many days during the week, which days of the week, the amount of time per watering station, and other pertinent details. Watering of landscaped areas that are not irrigated by a landscape irrigation system shall be subject to the same watering schedule and restrictions, using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation.

b. Vehicles shall not be washed except at commercial carwashes that recirculate water, or by high pressure/low volume wash systems.

c. Emptying and refilling of swimming pools and spas is prohibited unless approved by the City Manager.

d. All leaks shall be repaired within 48 hours of notification by the City of Poway unless other arrangements are made with the City Manager.

4. Upon the declaration of a Water Shortage Response Level 3 condition and by separate action of the City Council, the City of Poway is authorized to mandate that no new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as will serve letters, certificates, or letters of availability) shall be issued, unless findings are made that one or more of the following circumstances applies:

a. A valid, unexpired building permit has been issued for the project; or

b. The project is necessary to protect the public's health, safety, and welfare; or

c. The applicant provides substantial evidence prior to the provision of a new water meter(s) of an enforceable commitment that water demands for the project will be offset to the satisfaction of the City of Poway; or

- d. The City may allow new development to utilize conservation offsets and/or water-efficient technology in order to connect to the City's water system and access the City's water supply.

This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one year or less.

5. Upon the declaration of a Water Shortage Response Level 3 condition and by separate action of the City Council, the City of Poway is authorized to suspend consideration of annexations to its service area.
6. Allocation. During a Level 3 Water Shortage Alert, the City of Poway is authorized by action of the City Council to establish a water allocation for property receiving water service from the City of Poway, and to establish a penalty for any person that uses water in excess of their allocation.
7. Rate Structure. During a Water Shortage Response Level 3 condition, in addition to water use restrictions, the City is authorized by action of the City Council to implement a conservation rate structure designed to encourage water conservation. This rate structure may also include penalties to be used during periods of water allocation.

D. Level 4 – Water Shortage Response Emergency.

1. Activation. A Water Shortage Level 4 condition is also referred to as a "Water Shortage Emergency" condition. A Level 4 condition applies when the Water Authority Board of Directors declares a water shortage emergency pursuant to California Water Code Section 350 and notifies its member agencies that Level 4 requires a demand reduction of more than 40 percent in order for the City of Poway to have sufficient supplies available to meet anticipated demands.
2. Procedure. The City of Poway shall declare a water shortage emergency in the manner and on the grounds provided in California Water Code Section 350. The mandatory conservation measures applicable to a Water Shortage Response Level 4 condition shall take effect on the tenth day after the date the response level is declared, or upon an identified date thereafter. Within five days following the declaration of the response level, the City shall publish a copy of the resolution in a newspaper of general circulation used for publication of official notices. The City of Poway may also post notice of condition on its website.

The City Council may declare an end to a water shortage response level by adoption of a resolution at any regular or special meeting held in accordance with State law.
3. Water Use Restrictions. All persons using City of Poway water shall comply with conservation measures required during Level 1 Water Shortage Watch, Level 2 Water Shortage Alert, and Level 3 Water Shortage Critical conditions, and shall also comply with the following additional mandatory conservation measures:

a. Do not irrigate landscape, except crops and landscape products of commercial growers and nurseries. This restriction shall not apply to the following categories of use (unless the City of Poway has determined that recycled water is available and may be lawfully applied to the use to the fullest extent possible):

- i. Maintenance of trees and shrubs that are watered on the same schedule set forth at Level 3 by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation;
- ii. Maintenance of existing landscaping necessary for fire protection as specified by the Poway Fire Marshal;
- iii. Maintenance of existing landscaping for erosion control, as determined by the City Manager;
- iv. Maintenance of plant materials identified to be rare or essential to the well-being of rare animals, as determined by the City Manager;
- v. Maintenance of landscaping within active playing fields, day care centers, and school grounds; provided, that such irrigation does not exceed two days per week according to the schedule established by the City Manager;
- vi. Water for livestock; and
- vii. Public works projects and actively irrigated environmental mitigation projects.

b. All leaks must be repaired within 24 hours of notification by the City of Poway unless other arrangements are made with the City Manager.

4. Allocation. During a Level 4 Water Shortage Alert, the City of Poway is authorized by action of the City Council to establish a water allocation for property receiving water service from the City of Poway, and to establish a penalty for any person that uses water in excess of their allocation.

5. Rate Structure. During a Water Shortage Response Level 4 condition, in addition to water use restrictions, the City is authorized by action of the City Council to implement a conservation rate structure designed to encourage water conservation. This rate structure may also include penalties to be used during periods of water allocation. (Ord. 696 § 1, 2009; Ord. 682 § 1, 2008)

8.94.060 City-maintained parks, landscaped areas, and facilities.

The provisions of this chapter apply to City-maintained parks, athletic fields, landscaped areas, and facilities, with the exception of the watering schedule restrictions. Aggregate water use for these properties shall be restricted at the same level as required of the City of Poway as a water agency. (Ord. 682 § 1, 2008)

8.94.065 Poway Unified School District-maintained landscaped areas and facilities.

The provisions of this chapter apply to Poway Unified School District-maintained landscaped areas and facilities, with the exception of watering schedule restrictions. Water use shall be restricted at the same level as required of the City of Poway as a water agency. (Ord. 696 § 2, 2009)

8.94.070 Golf courses.

The provisions of this chapter apply to golf courses, with the exception of watering schedule restrictions. Golf course water use shall be restricted at the same level as required of the City of Poway as a water agency, including raw and potable water. (Ord. 682 § 1, 2008)

8.94.080 Commercial growers and nurseries.

The provisions of this chapter apply to commercial growers and nurseries, with the exception of watering schedule restrictions. Water use by commercial growers and nurseries shall be restricted at the same level as required of the City of Poway as a water agency, including raw and potable water. (Ord. 682 § 1, 2008)

8.94.090 Correlation between Drought Management Plan and water shortage response levels.

A. The correlation between the Water Authority's Drought Management Plan (DMP) stages and the City of Poway's water shortage response levels identified in this chapter is described herein. Under DMP Stage 1, the City of Poway would implement Water Shortage Response Level 1 actions. Under DMP Stage 2, the City of Poway would implement Water Shortage Response Level 1 or Level 2 actions. Under DMP Stage 3, the City of Poway would implement Water Shortage Response Level 2, Level 3, or Level 4 actions.

B. The water shortage response levels identified in this chapter correspond with the Water Authority DMP as identified in the following table:

Water Shortage Response Levels	Use Restrictions	Conservation Target	DMP Stage
1 – Water Shortage Watch	Voluntary	Up to 10%	Stage 1 or 2
2 – Water Shortage Alert	Mandatory	Up to 20%	Stage 2 or 3
3 – Water Shortage Critical	Mandatory	Up to 40%	Stage 3
4 – Water Shortage Emergency	Mandatory	Above 40%	Stage 3

(Ord. 682 § 1, 2008)

8.94.100 New landscaping and postponement of required landscaping.

A. New Landscaping. The City Manager may grant an exemption or a modification to the required watering schedule restrictions to property owners who have installed new low water use landscaping in order to establish the plants.

B. Postponement of Required Landscaping. The City Manager is authorized to direct developers of approved projects to postpone installation of required landscaping plant materials upon written agreement to install said improvements within six months of a change in the designated conservation stage. The developer's condition of approval to install landscaping shall be deemed satisfied by the execution of an agreement guaranteed by cash deposit, surety bond, letter of credit, or other security form acceptable to the City Attorney and in an amount equal to 150 percent of the installation cost as estimated by the City Manager. (Ord. 682 § 1, 2008)

8.94.110 Hardship variance.

A. If, due to unique circumstances, a specific requirement of this chapter would result in undue hardship to a person using agency water or to property upon which agency water is used, that is disproportionate to the impacts to City of Poway water users generally or to similar property or classes of water uses, then the person may apply for a variance to the requirements as provided in this section.

B. The variance may be granted or conditionally granted, only upon a written finding of the existence of facts demonstrating an undue hardship to a person using agency water or to property upon which agency water is used, that is disproportionate to the impacts to City of Poway water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property.

1. Application. Application for a variance shall be on a form prescribed by the City of Poway and shall be accompanied by a nonrefundable processing fee in an amount set by resolution of the Poway City Council.

2. Supporting Documentation. The application shall be accompanied by photographs, maps, drawings, and/or other information, including a written statement of the applicant.

3. Required Findings for Variance. An application for a variance shall be denied unless the approving authority finds, based on the information provided in the application, supporting documents, or such additional information as may be requested, and on water use information for the property shown by the records of the City of Poway, all of the following:

a. That the variance does not constitute a grant or special privilege inconsistent with the limitations upon other City of Poway water customers.

b. That because of special circumstances applicable to the property or its use, the strict application of this chapter would have a disproportionate impact on the property or use that exceeds the impacts to customers generally.

c. That the authorizing of such variance will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the City of Poway to effectuate the purpose of this chapter and will not be detrimental to the public interest.

d. That the condition or situation of the subject property or the intended use of the property for which the variance is sought is not common, recurrent or general in nature.

4. Approval Authority. The City Manager shall exercise approval authority and act upon any completed application no later than 10 days after submittal and may approve, conditionally approve, or deny the variance. The applicant requesting the variance shall be promptly notified in writing of any action taken. Unless specified otherwise at the time a variance is approved, the variance applies to the subject property during the term of the mandatory water shortage response. (Ord. 682 § 1, 2008)

8.94.120 Appeals.

A. An appeal shall be filed in writing with the City Clerk to review any action taken by the City Manager hereunder within 15 days of the date of service or mailing of the written decision made pursuant to PMC 8.94.110. Appeals filed late shall be denied. Appeals shall be conducted using an independent hearing officer, according to the appeal procedure set forth for administrative citations in PMC 1.10.070 through 1.10.110, except that the deposit required by PMC 1.10.070 shall not be applicable.

B. The appeal shall be granted in whole or in part, or denied, in accordance with the following standards:

1. Protection of the public health, safety and welfare;
2. The existence of special circumstances creating an undue or unreasonable hardship on appellant; provided, that granting of the appeal, in whole or in part, shall not constitute a privilege to the appellant not enjoyed by others in the same circumstances, shall not cause water to be wasted or used in an unreasonable manner, and shall not be contrary to the purpose of this chapter. (Ord. 682 § 1, 2008)

8.94.130 Supersedure.

If any provisions of this chapter are inconsistent with previous actions of the City Council pertaining to plans to respond to drought conditions, the provisions hereof shall supersede such inconsistent provisions. (Ord. 682 § 1, 2008)

8.94.140 Enforcement.

In addition to the penalties set forth in Chapters 1.08 and 1.10 PMC for the violation of a City ordinance, the following penalties shall apply to any person, corporation, or association violating any provision of this chapter:

- A. A first violation shall result in a letter of warning accompanied by a copy of this chapter.
- B. A second violation shall result in a \$100.00 surcharge, which will be added to the water bill.
- C. A third violation within a 12-month period shall result in a \$200.00 surcharge, which will be added to the water bill.

D. Any subsequent violation occurring within one year of any third violation shall result in a \$500.00 surcharge, which will be added to the water bill, and possible installation of a flow restrictor, until the sunset of the ordinance codified in this chapter.

E. Any further violation may result in the water service being turned off.

The City Manager shall determine if and when violations occurred. Any person disagreeing with the notice of violation may appeal in accordance with PMC 8.94.110 and 8.94.120 hereafter by written notice received by the City Clerk within 15 days of the date of notice of violation. Any notice of violation not timely appealed shall be final. Pending any appeal provided for herein, the City Manager may take appropriate steps to prevent the unauthorized use of water as appropriate to the nature and extent of the violation and the current declared water condition.

Any surcharge hereunder shall be in addition to the basic water rates or other charges of the City for the account, shall appear on and be payable with the first billing statement for the period during which the violation occurred, and be subject to the same remedies that are imposed by the City for the failure to pay other charges.

In addition to any surcharges mentioned above, all costs for installing or removing any flow restrictor devices and/or any charges to discontinue or restore service shall be the sole cost of the customer whose service is affected and shall be paid promptly upon being billed. (Ord. 682 § 1, 2008)

This page of the Poway Municipal Code is current through Ordinance 716, passed March 15, 2011.

Disclaimer: The City Clerk's Office has the official version of the Poway Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

City Website: <http://www.poway.org/>
(<http://www.poway.org/>)
City Telephone: (858) 668-4530
Code Publishing Company
(<http://www.codepublishing.com/>)

**CALIFORNIA URBAN WATER CONSERVATION COUNCIL
2009 AND 2010 BEST MANAGEMENT PRACTICE REPORTS**



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Agency: **City of Poway** District Name: **City of Poway** CUWCC Unit #: **76**
 Retail

Primary Contact: **Kristen Crane** Telephone: **858-668-4707** Email: **kcrane@poway.org**

Compliance Option Chosen By Reporting Agency:
 (Traditional, Flex Track or GPCD)

GPCD if used:

GPCD in 2010	170
GPCD Target for 2018	215

Year	Report	Target	Highest Acceptable Bound			
			% Base	GPCD	% Base	GPCD
2010	1		96.4%	253	100%	262
2012	2		92.8%	244	96%	253
2014	3		89.2%	234	93%	244
2016	4		85.6%	225	89%	234
2018	5		82.0%	215	82%	215

Not on Track if 2010 GPCD is \geq than target

GPCD in 2010 **170**
 Highest
 Acceptable GPCD **262**
 for 2010

On Track

Agency: **City of Poway**
Retail

District Name: **City of Poway**

CUWCC Unit #: **76**



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operational Practices

		Conservation Coordinator provided with necessary resources to implement BMPs?	
1.Conservation Coordinator provided with necessary resources to implement BMPs?		2009	2010
	Name	Kristen Crane	Kristen Crane
	Title	Utilities Administrator	Utilities Administrator
	Email		kcrane@poway.org
		On Track	On Track
2. Water waste prevention documentation			
	Descriptive File	BMP 1-1 - Final Report and	
	Descriptive File 2010		BMP 1-1 - Final Report and Ordinance - 11-18-08; BMP 1-1 - Final Water Conservation Ordinance - Adopted 12-02-08
	URL	The City updated Poway Municipal Code - Chapter 8.94 -	
	URL 2010		http://www.codepublishing.com/CA/poway/frameless/index.pl?path=../html/Poway08/poway0894.html#8.9
	Describe Ordinance Terms	The City updated Poway Municipal Code - Chapter 8.94 -	
	Describe Ordinance Terms 2010		The City updated Poway Municipal Code - Chapter 8.94 - Water Conservation Plan in Dec. 2008. Developed in collaboration with the San
		On Track	On Track

Agency: **City of Poway**
Retail

District Name: **City of Poway**

CUWCC Unit #: **76**



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

BMP 1.2 Water Loss Control

	2009	
Complete a prescreening Audit	yes	On Track
Metered Sales	12,398	
Verifiable Other Uses	114	
Total Supply	12,841	
(Metered Sales + System uses)/ Total Supply >0.89	0.97	On Track
If ratio is less than 0.9, complete a full scale Audit in 2009?	Yes	On Track
Verify Data with Records on File?	Yes	On Track
Operate a system Leak Detection Program?	Yes	On Track

On Track if Yes

On Track if ≥ 0.89 , Not on Track if No

On Track if Yes

On Track if Yes

On Track if Yes

Agency: **City of Poway**
Retail

District Name: **City of Poway**

CUWCC Unit #: **76**

						2010	
Compile Standard Water Audit using AWWA Software?						Yes	On Track
AWWA file provided to CUWCC?						COPoway_2010_AWWA Water Audit Worksheets.xlsx	On Track
AWWA Water Audit Validity Score?							84
Completed Training in AWWA Audit Method?						yes	
Completed Training in Component Analysis Process?						Yes	
Complete Component Analysis?						Yes	
Repaired all leaks and breaks to the extent cost effective?						Yes	On Track
Locate and repair unreported leaks to the extent cost effective.						Yes	On Track
Maintain a record-keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.							
Provided 7 types of Water Loss Control Info							
Leaks Repaired	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost of Interventions	Water Saved	
11	\$ 299,973	\$ 99,865	0	Off	\$ 76,000	0	

On Track if Yes, Not on Track if No

On Track if Yes, Not on Track if No

Info only until 2012

Info only until 2012

Info only until 2012

On Track if Yes, Not on Track if No

On Track if Yes, Not on Track if No

Info only until 2012

Info only until 2012



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

1.3 METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS

Exemption or 'At least as Effective As' accepted by CUWCC						<p>If signed MOU prior to 31 Dec 1997, On Track if all connections metered; If signed after 31 Dec 1997, complete meter installations by 1 July 2012 or within 6 yrs of signing and 20% biannual reduction of unmetered connections.</p> <p>On Track if no unmetered accounts</p> <p>Volumetric billing required for all connections on same schedule as metering</p> <p>Info only</p> <p>On Track if Yes, Not on Track if No</p> <p>On Track if Yes, Not on Track if No</p> <p>On Track if Yes, Not on Track if No</p>
Numbered Unmetered Accounts	2008	2009		2010		
		0	On Track	0	On Track	
Metered Accounts billed by volume of use		Yes	On Track	Yes	On Track	
Number of CII accounts with Mixed Use meters		NA		NA		
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?		Yes	On Track	Yes	On Track	
Feasibility Study provided to CUWCC?		Yes	On Track	Yes	On Track	
Completed a written plan, policy or program to test, repair and replace meters		Yes	On Track	Yes	On Track	



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Agency: **City of Poway**

Retail

District Name: **City of Poway**

CUWCC Unit #: **76**

Coverage Report Date: **June 9, 2011**

Primary Contact **Kristen Crane**

Email: **kcrane@poway.org**

1.4 Retail Conservation Pricing

Metered Water Rate Structure

Date 2009 data received **May 26, 2011**

Date 2010 data received **May 26, 2011**

On Track if: Increasing Block, Uniform,
Allocation, Standby Service; Not on Track if
otherwise

Customer Class	2009 Rate Type	Conserving Rate?	Customer Class	2010 Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes	Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes	Multi-Family	Uniform	Yes
Commercial	Uniform	Yes	Commercial	Uniform	Yes
Industrial	Uniform	Yes	Industrial	Uniform	Yes
Dedicated Irrigation	Uniform	Yes	Dedicated Irrigation	Uniform	Yes
On Track			On Track		

Year Volumetric Rates began for Agencies with some
Unmetered Accounts

Info only

Agencies with Partially Metered Service Areas: If signed MOU prior to 31 Dec. 1997, implementation starts no later than 1 July 2010. If signed MOU after 31 Dec. 1997, implementation starts no later than 1 July 2013, or within seven years of signing the MOU,

Agency: **City of Poway**
Retail

District Name: **City of Poway**

CUWCC Unit #: **76**

Coverage Report Date: **June 9, 2011**



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Adequacy of Volumetric Rates) for Agencies with No Unmetered Accounts

Customer Class	2009 Rate Type	2009 Volumetric Revenues \$1000s	2010 Rate Type	2010 Volumetric Revenues \$1000s
Single-Family	Increasing Block	\$ 9,984	Single-Family	\$ 10,089
Multi-Family	Uniform	\$ 602	Multi-Family	\$ 737
Commercial	Uniform	\$ 1,172	Commercial	\$ 1,370
Industrial	Uniform	\$ 150	Industrial	\$ 185
Dedicated Irrigation	Uniform	\$ 1,481	Dedicated Irrigation	\$ 1,607
Other		\$ 30		\$ 64
Agricultural		\$ 68		\$ 65
Total Revenue Commodity Charges (V):		\$ 13,488	\$ 14,117	
Total Revenue Fixed Charges (M):		\$ 2,424	\$ 2,753	
Calculate: V / (V + M):		85%	84%	
		On Track	On Track	

Agency Choices for rates:

A) Agencies signing MOU prior to 13 June2007, implementation starts 1 July2007: On Track if $(V / (V + M)) \geq 70\% \times .8 = 56\% \text{ for 2009}$ and $70\% \times 0.90 = 63\% \text{ for 2010}$; Not on track if $(V / (V + M)) < 70\%$;

B) Use Canadian model. Agencies signing MOU after 13June2007, implementation starts July 1 of year following signing.

Canadian Water & Wastewater Rate Design Model Used and Provided to CUWCC
If Canadian Model is used, was 1 year or 3 year period applied?

No

No

Wastewater Rates

Does Agency Provide Sewer Service?

2009

Yes

If 'No', then wastewater rate info not required.

2010

Yes

Customer Class	2009 Rate Type	Conserving Rate?	Customer Class	2010 Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes	Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes	Multi-Family	Uniform	Yes
Commercial	Uniform	Yes	Commercial	Uniform	Yes
Industrial	Uniform	Yes	Industrial	Uniform	Yes
On Track			On Track		

On Track if: 'Increasing Block', 'Uniform', 'based on long term marginal cost' or 'next unit of capacity'



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

BMP 2. EDUCATION PROGRAMS

BMP 2.1 Public Outreach Actions Implemented and Reported to CUWCC

Does a wholesale agency implement Public Outreach Programs for this utility's benefit?
Names of Wholesale Agencies

1) Contacts with the public (minimum = 4 times per year)

2) Water supplier contacts with media (minimum = 4 times per year, i.e., at least quarterly).

3) An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly).

4) Description of materials used to meet minimum requirement.

5) Annual budget for public outreach program.

6) Description of all other outreach programs

2009	2010
Yes	Yes
San Diego County Water Authority Metropolitan Water District	San Diego County Water Authority Metropolitan Water District
90	60
20	19
Yes	Yes
Newsletter articles on conservation Website General water conservation information Newsletter articles on conservation News releases Newspaper contacts Articles or stories resulting from outreach Written editorials	Newsletter articles on conservation Website General water conservation information Newsletter articles on conservation News releases Newspaper contacts Articles or stories resulting from outreach Television contacts
\$ 29,183	\$ 36,316
Description is too large for text area. Data will be stored in the BMP Reporting database when online.	Description is too large for text area. Data will be stored in the BMP Reporting database when online.
On Track	On Track

Yes/No

All 6 action types implemented and reported to CUWCC to be 'On Track')



CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

2.2 School Education Programs Implemented and Reported to CUWCC

Does a wholesale agency implement School Education Programs for this utility's benefit?	2009	2010	
Name of Wholesale Supplier?	Yes	Yes	
	Metropolitan Water District of Southern California; San Diego County Water Authority	Metropolitan Water District of Southern California; San Diego County Water Authority	
1) Curriculum materials developed and/or provided by agency	Materials are provided by SDCWA. 3rd and 4th grade history video/DVD; "Give Water a Second Chance...Re-cycle it!" for 5th grade; "Be Water Smart" DVD, water quality testing kit for high school science teachers' classroom use; "Water Science in a Box" for	Materials are provided by SDCWA. 3rd and 4th grade history video/DVD; "Give Water a Second Chance...Re-cycle it!" for 5th grade; "Be Water Smart" DVD, water quality testing kit for high school science teachers' classroom use; "Water Science in a Box" for	Yes/ No
2) Materials meet state education framework requirements and are grade-level appropriate?	Yes	Yes	All 5 actions types implemented and reported to CUWCC to be
3) Materials Distributed to K-6?	Yes	Yes	
Describe K-6 Materials	Availability of materials promoted to all elementary school principals in Poway. 3rd and 4th grade history video/DVD. "Give Water a Second Chance...Re-cycle it!" booklet for 5th grade; "Be Water Smart" DVD for 4th-6th grades; "Water Science in a Box" fo	Availability of materials promoted to all elementary school principals in Poway. 3rd and 4th grade history video/DVD. "Give Water a Second Chance...Re-cycle it!" booklet for 5th grade; "Be Water Smart" DVD for 4th-6th grades; "Water Science in a Box" fo	Describe materials to meet minimum requirements
Materials distributed to 7-12 students?	No	No	Info Only
4) Annual budget for school education program.	\$ -	\$ -	
5) Description of all other water supplier education programs	Other programs offered by SDCWA include "Traveling Library" program, youth and scout patch program; 20-Gallon Challenge Student Pledge contest; Splash Science Mobile Lab; "H2O: Where did you go?" theatre program; SDCWA's annual budget for school education	Other programs offered by SDCWA include "Traveling Library" program, youth and scout patch program; 20-Gallon Challenge Student Pledge contest; Splash Science Mobile Lab; "H2O: Where did you go?" theatre program; SDCWA's annual budget for school education	
	See Wholesale Report	See Wholesale Report	
	On Track	On Track	



California Urban Water
Conservation Council

2020 GPCD Target Calculator ^{v1.5}

This spreadsheet-based calculator is designed to help urban retail water suppliers establish a 2020 water use target

The methodologies contained herein are consistent with the publication *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*, the purpose of which is to ensure the consistent implementation of the Water Conservation Act of 2009.

Name of City or Utility:	<input type="text" value="City of Poway"/>	Telephone:	<input type="text" value="858-668-4707"/>
Name of Contact:	<input type="text" value="Kristen Crane"/>	Ext:	<input type="text"/>
Email:	<input type="text" value="kcrane@poway.org"/>		
Reporting Period:	<input type="text" value="Calendar Year (Jan-Dec)"/>		
Beginning Month:	<input type="text" value="January"/>		

Guidance & Instructions

This GPCD target calculator is designed to enable the user to generate and select a 2020 water use target

Only systems serving more than 3,000 end users, or that supply more than 3,000 acre-feet of potable water annually at municipal purposes need to develop a target.

Please note the following items:

All data entry is required to be in units of **Acre-feet**, unless indicated otherwise.

☐ Cells shown in this color are for data entry.

☐ Cells shown in this color are calculated fields and cannot be changed or overwritten.

☒ Option buttons for user selection.

Data can be input monthly, or annually; the monthly totals will override the annual totals. However, when entering monthly data, ensure all month fields are completed. Do NOT leave blanks. For zero enter "0".

If any month is left blank, all other monthly data for that year will be ignored and the annual total will be used.

☐ Cells shown in this color warn the user that monthly data has been left blank and therefore other monthly data entered for the year will be ignored.

☐ User tips are shown in these boxes.

The flow chart below shows how the result of evaluating 2008 recycled water against water delivered impacts the choice of baseline periods and required data input.

Please read before data entry begins...

Establishing a baseline period is a key step in developing a 2020 water use target. The choice of baseline period is dependent on the result of evaluating 2008 recycled water use against water delivered and the result of this test will determine, to some extent, the timeframe for required data input. Please see below for more details...



Use a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010, to calculate Base Daily Per Capita Water Use.

Use a continuous 10 to 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010, to calculate Base Daily Per Capita Water Use.

Select a Baseline period and ending year and the intersection of the highlighted row and column indicates the earliest year required for data entry.

Ending ...	Baseline 10-years	Baseline 11-years	Baseline 12-years	Baseline 13-years	Baseline 14-years	Baseline 15-years
2010	<input checked="" type="radio"/> 2001	<input type="radio"/> 2000	<input type="radio"/> 1999	<input type="radio"/> 1998	<input type="radio"/> 1997	<input type="radio"/> 1996
2009	<input type="radio"/> 2000	<input type="radio"/> 1999	<input type="radio"/> 1998	<input type="radio"/> 1997	<input type="radio"/> 1996	<input type="radio"/> 1995
2008	<input type="radio"/> 1999	<input type="radio"/> 1998	<input type="radio"/> 1997	<input type="radio"/> 1996	<input type="radio"/> 1995	<input type="radio"/> 1994
2007	<input type="radio"/> 1998	<input type="radio"/> 1997	<input type="radio"/> 1996	<input type="radio"/> 1995	<input type="radio"/> 1994	<input type="radio"/> 1993
2006	<input type="radio"/> 1997	<input type="radio"/> 1996	<input type="radio"/> 1995	<input type="radio"/> 1994	<input type="radio"/> 1993	<input type="radio"/> 1992
2005	<input type="radio"/> 1996	<input type="radio"/> 1995	<input type="radio"/> 1994	<input type="radio"/> 1993	<input type="radio"/> 1992	<input type="radio"/> 1991
2004	<input type="radio"/> 1995	<input type="radio"/> 1994	<input type="radio"/> 1993	<input type="radio"/> 1992	<input type="radio"/> 1991	<input type="radio"/> 1990



Main Data

Input cells:
Calculated cells:

Data Entry in acre-feet unless otherwise noted

Volume from Own Sources

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST- MENT (%)	CALCULATED TOTAL
2010													-		0.000
2009													-		0.000
2008													-		0.000
2007													-		0.000
2006													-		0.000
2005													-		0.000
2004													-		0.000
2003													-		0.000
2002													-		0.000
2001													-		0.000
2000													-		0.000
1999													-		0.000
1998													-		0.000
1997													-		0.000
1996													-		0.000
1995													-		0.000
1994													-		0.000
1993													-		0.000
1992													-		0.000
1991													-		0.000
1990													-		0.000

Volume from Imported Sources

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST- MENT (%)	CALCULATED TOTAL
2010													10,266.000		10,266.000
2009													12,419.000		12,419.000
2008													14,325.000		14,325.000
2007													15,718.000		15,718.000
2006													17,653.000		17,653.000
2005													16,197.000		16,197.000
2004													15,203.000		15,203.000
2003													14,428.000		14,428.000
2002													15,294.000		15,294.000
2001													13,659.000		13,659.000
2000													14,767.000		14,767.000
1999													14,708.000		14,708.000
1998													11,363.000		11,363.000

[illegible]

13,322,000	13,322,000
13,210,000	13,210,000
10,622,000	10,622,000
12,064,000	12,064,000
10,465,000	10,465,000
11,422,000	11,422,000
10,632,000	10,632,000
13,847,000	13,847,000

Volume of Water Exported to Another Water Utility or Jurisdiction

[illegible]

ANNUAL TOTAL (INPUT)	METER ADJUST- MENT (%)	CALCULATED TOTAL
0.000		0.000
233.000		233.000
93.000		93.000
5.000		5.000
334.000		334.000
236.000		236.000
166.000		166.000
118.000		118.000
59.000		59.000
0.000		0.000
16.000		16.000
120.000		120.000
60.000		60.000
93.000		93.000
15.000		15.000
29.000		29.000
148.000		148.000
74.000		74.000
697.000		697.000
161.000		161.000
2,907.000		2,907.000

Recycled Water Delivered

NOTE: Only 2008 recycled water delivered is required; other years are optional

[illegible]

ANNUAL TOTAL (INPUT)	METER ADJUST- MENT (%)	CALCULATED TOTAL
498.000		498.000
621.000		621.000
652.000		652.000
563.000		563.000
336.000		336.000
549.000		549.000
357.000		357.000
599.000		599.000
416.000		416.000
306.000		306.000

[illegible][illegible]

Change in Distribution System Storage

[illegible]

Year	ANNUAL CHANGE IN STORAGE	CALCULATED Net Change in Storage
2010	353,000	353,000
2009	774,000	774,000
2008	175,000	175,000
2007	39,000	39,000
2006	1,780,000	1,780,000
2005	2,025,000	2,025,000
2004	-267,000	-267,000
2003	17,000	17,000
2002	29,000	29,000
2001	-318,000	-318,000
2000	-770,000	-770,000
1999	350,000	350,000
1998	-489,000	-489,000
1997	-331,000	-331,000
1996	-115,000	-115,000
1995	-489,000	-489,000
1994	627,000	627,000
1993	-358,000	-358,000
1992	-434,000	-434,000
1991	592,000	592,000
1990	267,000	267,000

Indirect Recycled Water Use

[illegible]

Year	ANNUAL TOTAL (INPUT)	CALCULATED TOTAL
2010	0.000	0.000
2009	0.000	0.000
2008	0.000	0.000
2007	0.000	0.000
2006	0.000	0.000
2005	0.000	0.000
2004	0.000	0.000

[illegible]

Gross Water Use

ANNUAL TOTAL USAGE	9,876,000
	11,363,000
	13,863,000
	15,088,000
	14,775,000
	13,908,000
	15,247,000
	13,917,000
	15,147,000
	13,557,000
	14,971,000
	13,620,000
	11,533,000
	13,024,000
	12,987,000
	10,999,000
	10,798,000
	10,124,000
	10,274,000
	9,126,000
	9,857,000



Population

Input cells:
Calculated cells:

Enter population data for the service area.

YEAR	POPULATION
2010	51,789
2009	51,062
2008	50,649
2007	50,440
2006	50,257
2005	50,250
2004	50,186
2003	49,858
2002	49,476
2001	48,758
2000	47,796
1999	47,321
1998	46,854
1997	46,392
1996	45,934
1995	45,482
1994	45,033
1993	44,590
1992	44,155
1991	43,724
1990	43,292

Please note:

The GPCD calculation is very sensitive to errors in population. Please review the guidance document ***Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*** for additional information and direction in order to acquire the most accurate population estimates.

Population data are only required for years that contain water use data.

If you see "<--Enter Population" this indicates you have entered water use data for this timeframe but not population. Please add population data to enable a calculation of GPCD and associated targets.

49,259 Average population, for the baseline period selected, in the GPCD Matrix worksheet



This worksheet can be used as a calculator to generate an annual total for each year of input to the Main Data worksheet:

(see here)

Annual Deductable Volume of Indirect Recycled Water Entering Distribution System

Input cells:
Calculated cells:

Data Entry in acre-feet unless otherwise noted

Surface Reservoir Augmentation	N/A	(2)	(3)	Volume Discharged from Reservoir for Distribution System Delivery		Recycled Water Blend %	Recycled Water Delivered to Treatment Plant	Use Default <input type="checkbox"/> 3%		Transmission / Treatment Losses	Transmission / Treatment Losses	Volume entering Distribution System
				(4)	(5)			(6)	(7)			
Source 1				0.000	0%	0%	0.000	0%	0%	0.000	0.000	0.000
Source 2				0.000	0%	0%	0.000	0%	0%	0.000	0.000	0.000
Source 3				0.000	0%	0%	0.000	0%	0%	0.000	0.000	0.000
Source 4				0.000	0%	0%	0.000	0%	0%	0.000	0.000	0.000
Source 5				0.000	0%	0%	0.000	0%	0%	0.000	0.000	0.000

Subtotal Reservoir Augmentation (A): 0.000

Groundwater Recharge	(1)	5-Year Annual Average Recharge	(2)	Use Default <input type="checkbox"/> 90%	Recharge Recovery Factor	(3)	Recycled Water Pumped from Basin	(4)	Utility Pumping as % of Basin Total	(5)	Recycled Water Pumped by Utility	(6)	Use Default <input type="checkbox"/> 3%		Transmission / Treatment Losses	Transmission / Treatment Losses	Volume entering Distribution System
													(7)	(8)			
Basin 1		0.000				0.000	0.000	0%	0%	0%	0.000	0.000	0%	0%	0.000	0.000	0.000
Basin 2		0.000				0.000	0.000	0%	0%	0%	0.000	0.000	0%	0%	0.000	0.000	0.000
Basin 3		0.000				0.000	0.000	0%	0%	0%	0.000	0.000	0%	0%	0.000	0.000	0.000
Basin 4		0.000				0.000	0.000	0%	0%	0%	0.000	0.000	0%	0%	0.000	0.000	0.000
Basin 5		0.000				0.000	0.000	0%	0%	0%	0.000	0.000	0%	0%	0.000	0.000	0.000

Subtotal Groundwater Recharge (B): 0.000

Deductable Volume of Indirect Recycled Water Entering Distribution System (A+B): 0.000

Transfer this value back to



GPCD Matrix

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL GPCD
2010	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2
2009	198.7	198.7	198.7	198.7	198.7	198.7	198.7	198.7	198.7	198.7	198.7	198.7	198.7
2008	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4	244.4
2007	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0
2006	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5	262.5
2005	247.1	247.1	247.1	247.1	247.1	247.1	247.1	247.1	247.1	247.1	247.1	247.1	247.1
2004	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2
2003	249.2	249.2	249.2	249.2	249.2	249.2	249.2	249.2	249.2	249.2	249.2	249.2	249.2
2002	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3
2001	248.2	248.2	248.2	248.2	248.2	248.2	248.2	248.2	248.2	248.2	248.2	248.2	248.2
2000	279.6	279.6	279.6	279.6	279.6	279.6	279.6	279.6	279.6	279.6	279.6	279.6	279.6
1999	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0
1998	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7
1997	250.6	250.6	250.6	250.6	250.6	250.6	250.6	250.6	250.6	250.6	250.6	250.6	250.6
1996	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4
1995	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
1994	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1
1993	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7	202.7
1992	207.7	207.7	207.7	207.7	207.7	207.7	207.7	207.7	207.7	207.7	207.7	207.7	207.7
1991	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3
1990	203.3	203.3	203.3	203.3	203.3	203.3	203.3	203.3	203.3	203.3	203.3	203.3	203.3

Recycled water accounts for 4.7 % of 2008 deliveries, therefore select a 10 year baseline period using the selection buttons below

Baseline Ending In...	Baseline 10- years	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2010	<input type="radio"/>	243.2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2009	<input type="radio"/>	254.1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2008	<input checked="" type="radio"/>	259.9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2007	<input type="radio"/>	257.5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2006	<input type="radio"/>	255.8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2005	<input type="radio"/>	254.8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2004	<input type="radio"/>	251.1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Min Value Max Value

Ending in...	Baseline 5- years
<input type="radio"/> 2010	228.6
<input type="radio"/> 2009	243.9
<input checked="" type="radio"/> 2008	258.4
<input type="radio"/> 2007	259.4

User selection buttons:
Use the buttons to indicate the
chosen baseline period

Base daily per capita water use (10-15yr baseline)

259.9

Base daily per capita water use (5yr baseline)

258.4



California Urban Water
Conservation Council

Landscaped Area Water Use (method 2 only)

Input cells:
Calculated cells:

Please note:

Water suppliers shall develop an estimate (forecast) of 2020 landscaped areas for purposes; do not enter existing landscaped area data

	Reference Evapotranspiration (Inches per year)	Landscaped Area (1992 MWELO) (Square feet)	Landscaped Area (2009 MWELO) (Square feet)	Special Landscaped Area (Non- residential, non- commercial) (Square feet)	Maximum Applied Water Allowance (1992) (Gallons per year)	Maximum Applied Water Allowance (2009) (Gallons per year)	GPCD
ET zone 1							
ET zone 2							
ET zone 4							
ET zone 4							
ET zone 5							
ET zone 6							
ET zone 7							
ET zone 8							
ET zone 9							
ET zone 10							

2020 Target: 0.00

ET Zones:
Enter landscaped area data for



Commercial, Industrial & Institutional (CII) Water Use
(Method 2 only)

If you wish to exclude process water from the calculation of the baseline CII GPCD, enter process water volumes in the [Main Data sheet](#)

Input cells:
Calculated cells: **Data Entry in Acre-feet unless otherwise noted**

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUSTMENT (%)	CALCULATED TOTAL	POPULATION SERVED BY CII	ANNUAL CII GPCD
2010																	
2009																	
2008																	
2007																	
2006																	
2005																	
2004																	
2003																	
2002																	
2001																	
2000																	
1999																	
1998																	
1997																	
1996																	
1995																	
1994																	
1993																	
1992																	
1991																	
1990																	

Recycled water accounts for 4.7 % of 2008 deliveries, therefore select a 10 year baseline period using the selection buttons below

WARNING: Insufficient data for the selected baseline period; please add data or choose a different baseline period (in the GPCD worksheet)

Ending In...	Baseline 10-years	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2010	0.0							N/A
2009	0.0							N/A
2008	0.0							N/A
2007	0.0							N/A
2006	0.0							N/A
2005	0.0							N/A
2004	0.0							N/A

CII Baseline start and end date is determined by the selection made in the GPCD Matrix worksheet. The red outlined cell in the table to the left indicates the choice of baseline and the corresponding CII GPCD value.

Please add data or use a different baseline period

Min Value Max Value

Adjustments for Residential Uses in CII Connections
Some CII connections also may serve group quarters or other residential uses. Examples could include campus dormitories, military base housing, and apartments that are served by a CII connection. Water use target Method 2 already provides an indoor use allowance of 55 GPCD for such residents. To ensure that this indoor use is not double-counted, enter the population served by CII connections during the baseline period and whose residents use is included in the water supplier's unadjusted Baseline CII Water Use.

NOTE: This value is a subset of the Population value entered on the Population worksheet



TARGETS / COMPLIANCE (CUWCC MOU)

Baseline / Initial GPCD

(Use option buttons to select)

GPCD in 2006 ☒ 262.5
Baseline GPCD (1997 to 2006) ☐ 255.8

GPCD in 2010 ☐ 170.2
GPCD Target for 2018 ☐ 215.2

Biennial GPCD Compliance Table

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	253.0	100%	262.5
2012	2	92.8%	243.6	96.4%	253.0
2014	3	89.2%	234.1	92.8%	243.6
2016	4	85.6%	224.7	89.2%	234.1
2018	5	82.0%	215.2	82.0%	215.2

Potable Water GPCD for each Year in the Baseline Period

Year	GPCD
2006	262.5
2005	247.1
2004	271.2
2003	249.2
2002	273.3
2001	248.2
2000	279.6
1999	257.0
1998	219.7
1997	250.6

Monthly GPCD Data for Weather Normalization

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2	170.2
Baseline avg*	255.8	255.8	255.8	255.8	255.8	255.8	255.8	255.8	255.8	255.8	255.8	255.8

* The average for each month is based on the baseline period 1997 to 2006



TARGETS / COMPLIANCE (SBx7-7)

Input cells:
Calculated cells:

Target Summary	2020	2015
Method 1	208.0	234.0
Method 2	N/A	N/A
Method 3	141.6	200.7
Method 4	0.0	0.0

Min Value Max Value

GPCD in 2010	170.2
Base daily per capita water use (10-15yr baseline)	259.9
Base daily per capita water use (5yr baseline)	258.4
Max. allowable GPCD target in 2020 (95% x 5yr baseline)	245.5

Method 1: Baseline per Capita Water Use

80% x Base daily per capita water use (10-15yr baseline):

2015 Target:
2020 Target:

Method 2: Performance Standards

TM 2 Indoor Water Use allowance:
TM 6 Landscaped Area Water Use:
TM 7 Baseline CII Water Use:
2015 Target:
2020 Target:

Method 3: Hydrologic Region Targets

Enter the percentage of your service area population in each hydrologic region

Region	Region Name	% Population	GPCD Target
1	North Coast	0.0%	137
2	San Francisco Bay	0.0%	131
3	Central Coast	0.0%	123
4	South Coast	100.0%	149
5	Sacramento River	0.0%	176
6	San Jacinto	0.0%	174
7	Tulare lake	0.0%	188
8	North Lahontan	0.0%	173
9	South Lahontan	0.0%	170
10	Colorado River	0.0%	211
		100.0%	

2015 Target:
2020 Target:

Method 4:

To be Developed

The fields in red are required.



Agency name: Primary contact:
First name:
Reporting unit name (District name): Last name:
Reporting unit number: Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Base Year Data

[Link to FAQs](#)

Reporting Unit Base Year

Base Year

What is your reporting period?

BMP 1.3 Metering

Number of unmetered accounts in Base Year

BMP 3.1 & BMP 3.2 & BMP 3.3 Residential Programs

Number of Single Family Customers in Base Year

Number of Multi Family Units in Base Year

BMP 3.4 WaterSense Specification (WSS) Toilets

Number of Single Family Housing Units constructed prior to 1992

Number of Multi Family Units prior to 1992

Average number of toilets per single family household

Average number of toilets per multi family household

Five year average resale rate of single family households

Five-year average resale rate of multi family households

Average number of persons per single family household

Average number of persons per multi family household

BMP 4.0 & BMP 5.0 CII & Landscape

Total water use (in Acre Feet) by CII accounts

Number of accounts with dedicated irrigation meters

Number of CII accounts without meters or with Mixed Use Meters

Number of CII accounts

Comments:

The City of Poway does not have information available on five-year average resale rates for single-family or multi-family households. Per DataQuick, the average resale rate for 2010 for single-family homes was 6.1% from 2009.

The City of Poway does not have any CII accounts without meters. No data is available on how many CII meters are mixed use (indoor water use and outdoor irrigation).

BMP 1.2

The City of Poway tracks water loss by fiscal year rather than calendar year. Information for BMP 1.2 for 2009 is based on FY 2009 (July 1, 2008 - June 30, 2009).

BMP 1.3

The "Commercial" category includes "institutional" connections and deliveries. The "Dedicated Irrigation" category includes golf course raw water, but excludes recycled water.

BMP 1.4

The City of Poway implemented an increasing block rate structure for single-family residential customers in 2009.

BMP 2.1

Quantities of newspaper articles and media contacts are approximate. City's water conservation web site has 21 pages of content (12,611 visits in 2009). Public outreach annual budget data is based on Fiscal Year 2009 (July 1, 2008 thru June 30, 2009).

BMP 2.1 – Continued

- 2009 public outreach expense information is provided for the last BMP 2.1 question.
- The City of Poway does not separately track expenditures for social marketing.
- Additional public information efforts:
 - 1) Reminder message about conservation and 20-Gallon Challenge printed on water bills.
 - 2) Information printed on water bills showing current water use compared to same time one-year previous.
 - 3) Neighborhood Water Awareness Program to notify customers when water waste or irrigation problems are observed by the public or City employees. Includes door hanger and follow-up letter.
 - 4) Dedicated phone line message with recorded conservation information.
 - 5) Booths at local fairs/events.
 - 6) Presentations to civic groups.
 - 7) "Plant-astic Possibilities" brochure, featuring water-wise, fire-resistant plants.

BMP 2.2

The City of Poway does not separately track budget expenditures for school education programs. It is unknown how many City of Poway teachers took advantage of education programs offered by SDCWA.

The fields in red are required.

Primary contact:

Agency name:

City of Poway

First name:

Kristen

Division name
(Reporting unit)

City of Poway

Last name:

Crane

Reporting unit number:

76

Email:

kcrane@poway.org



WATER SOURCES

Service Area Population: 51,062

The City of Poway does not have any potable water sources.

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?
Potable wtr treated by City of Poway	233.00	San Diego County Water Authority

2009

Primary contact:

City of Poway

First name:

Kristen

City of Poway

Last name:

Crane

76

Email:

kcrane@poway.org



Service Area Population: 51,062

Non- Potable Water

If you select Other for type, enter

[illegible][illegible][illegible]

Primary contact:

City of Poway

First name:

City of Poway

Last name: Crane

76

Email: kcrane@poway.org



Water Uses

2009

Potable Water Billed

Make sure to enter numbers in AF/Year.

[illegible]

Potable Water Un-Billed

[illegible]

Primary contact:



Non-Potable Billed

Non-Potable Un-Billed

[illegible]

The fields in red are required.



Primary contact:
Agency name: First name:
Reporting unit name
(District name) Last name:
Reporting unit number: Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

2009

BMP 1.1 Operations Practices

Comments:

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP:

Conservation Coordinator

Conservation Coordinator ☒ Yes ☐ No

Contact Information

First Name
Last Name
Title
Phone
Email

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

Water Waste Prevention

Water Agency shall do one or more of the following:

- Enact and enforce an ordinance or establish terms of service that prohibit water waste
- Enact and enforce an ordinance or establish terms of service for water efficient design in new development
- Support legislation or regulations that prohibit water waste
- Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
- Support local ordinances that prohibit water waste
- Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

- A description of, or electronic link to, any ordinances or terms of service
- A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
- A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
- description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

Enter a description:

The City updated Poway Municipal Code - Chapter 8.94 - Water Conservation Plan in Dec. 2008. Developed in collaboration with the San Diego County Water Authority and its member agencies, as well as MWD, based on DWR's Drought Guidebook, the plan identifies four levels of action in response to a water supply shortage and includes water use efficiency measures recommended at all times.

The fields in red are required.



Agency name: City of Poway

Reporting unit name

(District name) City of Poway

Reporting unit number: 76

Primary contact:

First name: Kristen

Last name: Crane

Email: kcrane@poway.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

[View MOU](#)

2009 BMP 1.2 Water Loss Control

Did your agency complete a pre-screening system audit in 2009?

Yes

☒

No

☐

If yes, answer the following:

Determine metered sales in AF: 12,398.00

Definition: other accountable uses not included in metered sales, such as unbilled water use, fire suppression, etc.

→ Determine system verifiable uses AF: 113.77

Determine total supply into the system in AF: 12,841.40

Does your agency keep necessary data on file to verify the answers above?

Yes

☒

No

☐

Did your agency complete a full-scale system water audit during 2009?

Yes

☒

No

☐

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC?

Yes

☒

No

☐

Did your agency operate a system leak detection program?

Yes

☒

No

☐

Comments:

The City of Poway tracks water loss by fiscal year rather than calendar year. Information for BMP 1.2 for 2009 is based on FY 2009 (July 1, 2008 - June 30, 2009).

The fields in red are required.

Primary contact:

Agency name:

First name:

Reporting unit name

(District name)

Last name:

Reporting unit number:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



BMP 1.3 Metering with Commodity

[Link to FAQs](#)

[See the complete MOU: View MOU](#)

[See the coverage requirements for this BMP:](#)

Implementation

Does your agency have any unmetered service connections?

☒ Yes ☐ No

If YES, has your agency completed a meter retrofit plan?

☐ Yes ☒ No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered?

☒ Yes ☐ No

Are all new service connections being billed volumetrically?

☒ Yes ☐ No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?

☒ Yes ☐ No

Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	<input type="text" value="12,523"/>	<input type="text" value="12,523"/>	<input type="text" value="7,812"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Multi-Family	<input type="text" value="145"/>	<input type="text" value="145"/>	<input type="text" value="487"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Commercial	<input type="text" value="744"/>	<input type="text" value="744"/>	<input type="text" value="908"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Industrial	<input type="text" value="49"/>	<input type="text" value="49"/>	<input type="text" value="113"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Dedicated Irrigatic	<input type="text" value="242"/>	<input type="text" value="242"/>	<input type="text" value="1,034"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Other	<input type="text" value="40"/>	<input type="text" value="40"/>	<input type="text" value="659"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Agricultural	<input type="text" value="14"/>	<input type="text" value="14"/>	<input type="text" value="49"/>	<input type="text" value="Bi-monthly"/>	<input type="text" value="6"/>
Other	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
Other	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
Other	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>

Number of CII Accounts with Mixed-use Meters

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? ☒ Yes ☐ No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

General Comments about BMP 1.3:

Please see attached City of Poway 2009 BMP comment sheet.

The fields in red are required.

Primary contact:

Agency name: **City of Poway**

First name: **Kristen**

Reporting unit name

(District name) **City of Poway**

Last name: **Crane**

Reporting unit number:

76

Email: **kcrane@poway.org**

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



2009

BMP 1.4 Retail Conservation Pricing

[Link to FAQs](#)

[View MOU](#)

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue	Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Increasing Block	Single-Family	9,984,365.07		1,840,466.09
Uniform	Multi-Family	602,293.11		77,928.19
Uniform	Commercial	1,172,059.65		243,795.78
Uniform	Industrial	150,095.25		29,422.67
Uniform	Dedicated Irrigation	1,481,281.09		191,055.00
Uniform	Other	30,070.53		31,753.40
Uniform	Agricultural	68,278.05		10,064.29

Implementation Option (Conservation Pricing Option)

- ☒ Use Annual Revenue As Reported
☐ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service

☒ Yes ☐ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue	Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Increasing Block	Single-Family	5,010,892.79		1,039,650.26
Uniform	Multi-Family	604,222.12		47,187.00
Uniform	Commercial	1,265,375.51		150,095.88
Uniform	Industrial	177,498.39		17,621.99
Uniform	Other	971.70		412.70
Uniform	Agricultural	1,394.76		184.14
Select a Rate Struc	Select a Customer Tv			

Comments:

Please see attached City of Poway 2009 BMP comments.

The fields in red are required.

Primary contact:

Agency name: **City of Poway**

First name: **Kristen**

Reporting unit name

(District name) **City of Poway**

Last name: **Crane**

Reporting unit number: **76**

Email: **kcrane@poway.org**

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.



[Link to FAQs](#)

[View MOU](#)

2009

BMP 2.1 Public Outreach - Retail Reporting

Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP?

☒ Yes ☐ No

Enter the name(s) of the wholesale agency (comma delimited)

Metropolitan Water District of Southern California, San Diego County Water Authority

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place during each quarter of the reporting year? ☒

Public Information Programs List

Number of Public Contacts	Public Information Programs
4	Newsletter articles on conservation
6	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
21	Website
53	General water conservation information
6	Landscape water conservation media campaigns

Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP?

☒ Yes ☐ No

Enter the name(s) of the wholesale agency (comma delimited)

Metropolitan Water District of Southern California; San Diego County Water Authority

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? ☒

Media Contacts List

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types
5		News releases
4		Newspaper contacts
10		Articles or stories resulting from outreach
1		Written editorials
		Select a type of media contact
		Select a type of media contact

Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP? ☐ Yes ☒ No

Enter the name(s) of the wholesale agency (comma delimited)

The San Diego County Water Authority maintains their own water conservation information web pages. The City of Poway provides links to these pages.

www.poway.org/waterconservation

Information on rebate programs; landscape classes; lists of water-efficient plants; and press releases on water restrictions.

Did at least one Website Update take place during each quarter of the reporting year? ☐ Yes ☒ No

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or break the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount	Personnel Costs Included? If yes, check the box.	Comments
Community Rel	\$7,035	<input type="checkbox"/>	Street Fair, Splash Lab, poster contest, landsc
Printing	\$8,510	<input type="checkbox"/>	Level 2 postcards and water-wise/fire-resista
Professional Fee	\$1,263	<input type="checkbox"/>	Contract graphic design service
Postage	\$8,650	<input type="checkbox"/>	Postage to mail postcards City-wide about Le
Advertising	\$1,500	<input type="checkbox"/>	Newspaper advertising for landscape classes
Supplies & Mate	\$2,225	<input type="checkbox"/>	Materials for information booths and landscap

Comments:

Please see attached City of Poway 2009 BMP comment sheet.

The fields in red are required.

Primary contact:

Agency name: **City of Poway**

First name: **Kristen**

Reporting unit name

(District name) **City of Poway**

Last name: **Crane**

Reporting unit number: **76**

Email: **kcrane@poway.org**

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.



[Link to FAQs](#)

2009

BMP 2.1 Public Outreach Cont'd

[View MOU](#)

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?
		<input type="checkbox"/> If yes, check the check box.
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts?

☒ Yes ☐ No

Public Outreach Additional Information

Public Information Programs	Importance
Landscape Classes	1
Personalized Water Consumption History Reports Mailed to All Customers	2
Community Event Booths and Presentations to Community Groups	3

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? ☒ Yes ☐ No

Describe the brand, theme or mascot.

The City of Poway has a simple logo for the water conservation program that is used on all printed materials.

Market Research

Have you sponsored or participated in market research to refine your message? ☐ Yes ☒ No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservation committee?

☒ Yes ☐ No

Enter the names of the community committees:

The San Diego County Water Authority has a Conservation Action Committee that includes representatives from the landscape industry, government, and property managers.

Training

Training Type	# of Trainings	# of Attendees	Description of Other
Prof. Landscape			8 English and Spanish classes for landscape professionals
Res. Landscape			7 classes for homeowners; About 125 attendees total

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description

Partnering Programs - Partners

Name

Type of Program

☒ CLCA? Representatives of CLCA participate in the SDCWA Conservation Action Committee.

☒ Green Building Programs? The Poway Water Conservation program coordinates with the City's Development Services Department.

☒ Master Gardeners? The Poway Water Conservation program refers customers to the Master Gardeners for technical landscape assistance.

☐ Cooperative Extension?

☒ Local Colleges? Poway has hosted interns from Cuyamaca College and UCSD.

☐ Other

☒ Retail and wholesale outlet; name(s) and type(s) of programs:

Poway Nursery; Home Depot; Walter Anderson Nursery The City of Poway partners with local retail nurseries to advertise landscaping classes and distribute plant brochures.

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

San Diego Gas & Electric offers a rebate program for high-efficiency clothes washing machines. SDG&E has also invited the City of Poway to participate in local light bulb exchange events to provide water conservation educational materials.

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

The City of Poway partners with the Water Conservation Garden at Cuyamaca College.

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

The City of Poway held a California-Friendly Landscape Contest in Spring 2009.

Comments:

Please see attached City of Poway - 2009 BMP comment sheet.

The fields in red are required.



Agency name: Primary contact:
First name:
Reporting unit name: Last name:
(District name)
Reporting unit number: Email:

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Link to FAQs](#)

[View MOU](#)

2009

BMP 2.2 School Education Programs, Retail Agencies School Programs

Is your agency implementing school programs which can be counted to help another agency comply with this BMP?

☒ Yes ☐ No

Enter Wholesaler Names, separated by commas:

☒ Materials meet state education framework requirements?

Description of Materials

Materials are provided by SDCWA. 3rd and 4th grade history video/DVD; "Give Water a Second Chance...Re-cycle it!" for 5th grade; "Be Water Smart" DVD, water quality testing kit for high school science teachers' classroom use; "Water Science in a Box" for 1st, 2nd, and 3rd grades; "Watersheds and You" student workbook for 5th grade; "Water Works!" school-to-career curriculum; "WaterSmart Garden" curriculum.

☒ Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

Availability of materials promoted to all elementary school principals in Poway. 3rd and 4th grade history video/DVD. "Give Water a Second Chance...Re-cycle it!" booklet for 5th grade; "Be Water Smart" DVD for 4th-6th grades; "Water Science in a Box" for 1st, 2nd, and 3rd grades.

Number of students reached

☐ Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

Availability of materials promoted to all elementary school principals in Poway. Water quality testing kits are available to high school science teachers for use in their classrooms.

Number of Distribution

Annual budget for school education program

Description of all other water supplier education programs

Other programs offered by SDCWA include "Traveling Library" program, youth and scout patch program; 20-Gallon Challenge Student Pledge contest; Splash Science Mobile Lab; "H2O: Where did you go?" theatre program; SDCWA's annual budget for school education programs county-wide is \$450,500.

School Program Activities

Classroom presentations:

Number of presentations

Number of attendees

Large group assemblies:

Number of presentations

Number of attendees

Children's water festivals or other events:

Number of presentations

Number of attendees

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations

Number of attendees

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description		Not applicable	
Number distributed		0	
Staffing children's booths at events & festivals:			
Number of booths		0	
Number of attendees		0	
Water conservation contests such as poster and photo:			
Description		The City of Poway participated in a water awareness poster contest along with other water agencies from North San Diego County. Top entries were chosen for a 2010 calendar.	
Number distributed		200	
Offer monetary awards/funding or scholarships to students:			
Number Offered		0	
Total Funding		0	
Teacher training workshops:			
Number of presentations		0	
Number of attendees		0	
Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:			
Number of tours or field trips		2	
Number of participants		200	
College internships in water conservation offered:			
Number of internships		3	
Total funding		0	
Career fairs/workshops:			
Number of presentations		0	
Number of attendees		0	
Additional program(s) supported by agency but not mentioned above:			
Description		Water Awareness Storytime for Preschoolers at the Poway Library; Presentations to Scout troops; Presentations to adult civic groups; Booths at community events and Farmers' market;	
Number of events (if applicable)		19	
Number of participants		2,800	
Total reporting period budget expenditures for school education programs (include all agency costs):			

Comments

Please see attached City of Poway 2009 BMP comment sheet.

BMP 1.2

The City of Poway tracks water loss by fiscal year rather than calendar year. Information for BMP 1.2 for 2010 is based on FY 2010 (July 1, 2009 - June 30, 2010).

BMP 1.3

The "Commercial" category includes "institutional" connections and deliveries. The "Dedicated Irrigation" category includes golf course raw water, but excludes recycled water.

BMP 1.4

The City of Poway implemented an increasing block rate structure for single-family residential customers in 2009.

BMP 2.1

Quantities of newspaper articles and media contacts are approximate. City's water conservation web site has 21 pages of content (13,770 visits in 2010). Public outreach annual budget data is based on Fiscal Year 2010 (July 1, 2009 thru June 30, 2010).

BMP 2.1 – Continued

- Public outreach expense information for 2010 is provided for the last BMP 2.1 question.
- The City of Poway does not separately track expenditures for social marketing.
- Additional Public Information Efforts:
 - 1) Reminder message about conservation and 20-Gallon Challenge printed on water bills.
 - 2) Information printed on water bills showing current water use compared to same time one-year previous.
 - 3) Neighborhood Water Awareness Program to notify customers when water waste or irrigation problems are observed by the public or City employees. Includes door hanger and follow-up letter.
 - 4) Dedicated phone line message with recorded conservation information.
 - 5) Booths at local fairs/events.
 - 6) Presentations to civic groups.
 - 7) "Plant-astic Possibilities" brochure, featuring water-wise, fire-resistant plants.

BMP 2.2

The City of Poway does not separately track expenditures for school education programs. It is unknown how many City of Poway teachers took advantage of education programs offered by SDCWA.

The fields in red are required.

Primary contact:

Agency name: First name:
 Division name (Reporting unit): Last name:
 Reporting unit number: Email:



WATER SOURCES

Service Area Population:

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="Other"/>	<input type="text"/>

Exported Water Name	AF/YEAR	Where Exported?
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

2010

The fields in red are required.



Agency name: Primary contact: First name: Last name: Email:
 Division name (Reporting unit):
 Reporting unit number:

Service Area Population:

Non- Potable Water

If you select Other for type, enter

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
San Diego County Water Authority	10,266.00	Raw Water	<input type="text"/>
City of San Diego	251.00	Recycled Non Potable	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>
<input type="text"/>	<input type="text"/>	Select a water type.	<input type="text"/>

Exported Water Name	AF/YEAR	Where Exported? such as groundwater recharge, retail,
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

2010

Primary contact:

First name: _____

Kristen

City of Poway

Last name:

Crane

76

Email:

kcrane@poway.org



Potable Water Billed

Make sure to enter numbers in AF/Year.

[illegible]

Potable Water Un-Billed

[illegible]

Primary contact:



Non-Potable Billed

[illegible]

Non-Potable Un-Billed

[illegible]

The fields in red are required.



Primary contact:
Agency name: First name:
Reporting unit name
(District name) Last name:
Reporting unit number: Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

2010

BMP 1.1 Operations Practices

Comments:

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP:

Conservation Coordinator

Conservation Coordinator ☒ Yes ☐ No

Contact Information

First Name
Last Name
Title
Phone
Email

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

Water Waste Prevention

Water Agency shall do one or more of the following:

- Enact and enforce an ordinance or establish terms of service that prohibit water waste
- Enact and enforce an ordinance or establish terms of service for water efficient design in new development
- Support legislation or regulations that prohibit water waste
- Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
- Support local ordinances that prohibit water waste
- Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

- A description of, or electronic link to, any ordinances or terms of service
- A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
- A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
- description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

Enter a description:

The City updated Poway Municipal Code - Chapter 8.94 - Water Conservation Plan in Dec. 2008. Developed in collaboration with the San Diego County Water Authority and its member agencies, as well as MWD, based on DWR's Drought Guidebook, the plan identifies four levels of action in response to a water supply shortage and includes water use efficiency measures recommended at all times.

The fields in red are required.

Primary contact:

Agency name: **City of Poway**

First name: **Kristen**

Reporting unit name

(District name) **City of Poway**

Last name: **Crane**

Reporting unit number: **76**

Email: **kcrane@poway.org**

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



[Link to FAQs](#)

2010 BMP 1.2

Water Loss Control

[View MOU](#)

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software ☒ Yes ☐ No
Email to natalie@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

COPoway_2010_AWWA Water Audit Worksheets.xlsx

Water Audit Validity Score
from AWWA spreadsheet

84

Agency Completed Training In The AWWA Water Audit Method ☒ Yes ☐ No

Agency Completed Training In The Component Analysis Process ☒ Yes ☐ No

Completed/Updated the Component Analysis (at least every 4 years)? ☒ Yes ☐ No

Component Analysis Completed/Updated Date

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective ☒ Yes ☐ No

Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective ☒ Yes ☐ No

Type of Program Activities Used to Detect Unreported Leaks

Acoustic testing is used when a leak is suspected. Thirteen reported leaks were surveyed and determined to be groundwater.

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)
11	\$299,973.00	\$99,865.00	0		\$76,000.00	

Comments:

The City of Poway tracks water loss by fiscal year rather than calendar year. Information for BMP 1.2 for 2010 is based on FY 2010 (July 1, 2009 - June 30, 2010).

The fields in red are required.

Agency name: **City of Poway**

Primary contact:

First name: **Kristen**

Reporting unit name

(District name) **City of Poway**

Last name: **Crane**

Reporting unit number:

76

Email: **kcrane@poway.org**

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



BMP 1.3 Metering with Commodity 2010

[Link to FAQs](#)

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP:

Implementation

Does your agency have any unmetered service connections?

☒ Yes ☐ No

If YES, has your agency completed a meter retrofit plan?

☐ Yes ☐ No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered?

☒ Yes ☐ No

Are all new service connections being billed volumetrically?

☒ Yes ☐ No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?

☒ Yes ☐ No

Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	12,516	12,516	6,586	Bi-monthly	6
Multi-Family	145	145	452	Bi-monthly	6
Commercial	745	745	1,076	Bi-monthly	6
Industrial	49	49	113	Bi-monthly	6
Dedicated Irrigatic	242	242	909	Bi-monthly	6
Other	32	32	243	Bi-monthly	6
Agricultural	17	17	37	Bi-monthly	6
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? ☒ Yes ☐ No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted **05/18/2011**

B. Describe, upload or provide an electronic link to the Feasibility Study Upload File

File name(s): Email files to natalie@cuwcc.org

COPoway_BMP1-3_Feasibility_Study_Memo

Web address(s) URL: comma-separated list

Comments:

Please see attached City of Poway 2010 BMP comment sheet.

The fields in red are required.

Primary contact:

Agency name: **City of Poway**

First name: **Kristen**

Reporting unit name

(District name) **City of Poway**

Last name: **Crane**

Reporting unit number: **76**

Email: **kcrane@poway.org**

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



2010

[Link to FAQs](#)

BMP 1.4 Retail Conservation Pricing

[View MOU](#)

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Increasing Block	Single-Family	10,088,797.96	2,096,250.16
Uniform	Multi-Family	736,756.30	87,943.27
Uniform	Commercial	1,369,925.04	276,393.17
Uniform	Industrial	185,422.10	33,342.74
Uniform	Dedicated Irrigation	1,606,756.23	215,297.06
Uniform	Other	64,119.30	31,628.53
Uniform	Agricultural	64,743.68	11,833.01

Implementation Option (Conservation Pricing Option)

- ☒ Use Annual Revenue As Reported
☐ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service

☒ Yes ☐ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Increasing Block	Single-Family	5,241,104.23	1,100,774.05
Uniform	Multi-Family	604,827.02	47,190.24
Uniform	Commercial	1,256,346.17	150,930.67
Uniform	Industrial	178,961.60	17,704.62
Uniform	Other	0.00	0.00
Uniform	Agricultural	1,472.52	194.46
Select a Rate Struc	Select a Customer Ty		

Comments:

Please see attached City of Poway 2010 BMP comments.

The fields in red are required.



Agency name: Primary contact:
First name:
Reporting unit name
(District name) Last name:
Reporting unit number: Email:

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Link to FAQs](#)

[View MOU](#)

2010

BMP 2.1 Public Outreach - Retail Reporting

Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP?

☒ Yes ☐ No

Enter the name(s) of the wholesale agency (comma delimited)

Metropolitan Water District of Southern California, San Diego County Water Authority

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place during each quarter of the reporting year? ☒

Public Information Programs List

Number of Public Contacts	Public Information Programs
2	Newsletter articles on conservation
0	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
21	Website
29	General water conservation information
8	Landscape water conservation media campaigns

Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP?

☒ Yes ☐ No

Enter the name(s) of the wholesale agency (comma delimited)

Metropolitan Water District of Southern California; San Diego County Water Authority

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? ☒

Media Contacts List

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types
8		News releases
2		Newspaper contacts
8		Articles or stories resulting from outreach
0		Television contacts
1		Written editorials
		Select a type of media contact

Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP? ☐ Yes ☒ No

Enter the name(s) of the wholesale agency (comma delimited)

The San Diego County Water Authority maintains their own water conservation information web pages. The City of Poway provides links to these pages.

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):

www.poway.org/waterconservation

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

Information on rebate programs; landscape classes; lists of water-efficient plants; and press releases on water restrictions.

Did at least one Website Update take place during each quarter of the reporting year? ☒ Yes ☐ No

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or break the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount	Personnel Costs Included? If yes, check the box.	Comments
Community Rel ⁺	\$13,961	<input type="checkbox"/>	Street Fair booths, Splash Lab, Landscape C ⁺
Printing	\$1,500	<input type="checkbox"/>	Bill inserts, Level 2 door hangers, Poway-spe ⁺
Professional Fe ⁺	\$4,750	<input type="checkbox"/>	Contract graphic design and landscape class ⁺
Postage	\$12,000	<input type="checkbox"/>	Personalized 5-year consumption history rep ⁺
Advertising	\$975	<input type="checkbox"/>	Advertising promoting water conservation, re ⁺
Supplies & Mate ⁺	\$3,130	<input type="checkbox"/>	Materials for information booths and landsca ⁺

Comments:

Please see attached City of Poway 2010 BMP comment sheet.

The fields in red are required.

Primary contact:

Agency name: City of Poway

First name: Kristen

Reporting unit name

(District name) City of Poway

Last name: Crane

Reporting unit number: 76

Email: kcrane@poway.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.



[Link to FAQs](#)

2010

BMP 2.1 Public Outreach Cont'd

[View MOU](#)

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?
		<input type="checkbox"/> If yes, check the check box.
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts?

☒ Yes ☐ No

Public Outreach Additional Information

Public Information Programs	Importance
Landscape Classes	1
Community Event Booths	3
Presentations to Community Groups	2

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? ☒ Yes ☐ No

Describe the brand, theme or mascot.

The City of Poway has a simple logo for the water conservation program that is used on all printed materials.

Market Research

Have you sponsored or participated in market research to refine your message? ☐ Yes ☒ No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservation committee?

☒ Yes ☐ No

Enter the names of the community committees:

The San Diego County Water Authority has a Conservation Action Committee that includes representatives from the landscape industry, government, and property managers.

Training

Training Type	# of Trainings	# of Attendees	Description of Other
Res. Landscape			Series of four residential landscape classes; 85 attendees;
Landscape Class			Partnership with City of San Diego (Oct 2010); 35 attendees

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description

Partnering Programs - Partners

Name

Type of Program

☒ CLCA? Representatives of CLCA participate in the SDCWA Conservation Action Committee.

☒ Green Building Programs? The Poway Water Conservation Program coordinates with the City's Development Services Department.

☒ Master Gardeners? The Poway Water Conservation Program refers customers to the Master Gardeners for technical landscape assistance.

☐ Cooperative Extension?

☒ Local Colleges? Poway has hosted interns from Cuyamaca College and UCSD.

☐ Other

☒ Retail and wholesale outlet; name(s) and type(s) of programs:

Poway Nursery; Home Depot; Walter Anderson Nursery The City of Poway partners with local retail nurseries to advertise landscaping classes and distribute plant brochures.

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

San Diego Gas & Electric offers a rebate program for high-efficiency clothes washing machines. SDG&E has also invited the City of Poway to participate in local light bulb exchange events to provide water conservation education materials.

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

The City of Poway partners with the Water Conservation Garden at Cuyamaca College.

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

The City of Poway held a California-Friendly Landscape Contest in Spring 2009.

Comments:

Please see attached City of Poway - 2010 BMP comment sheet.

The fields in red are required.



Agency name: **City of Poway**
Reporting unit name (District name): **City of Poway**
Reporting unit number: **76**
Primary contact: First name: **Kristen**
Last name: **Crane**
Email: **kcrane@poway.org**

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Link to FAQs](#)

[View MOU](#)

2010

BMP 2.2 School Education Programs, Retail Agencies School Programs

Is your agency implementing school programs which can be counted to help another agency comply with this BMP?

☒ Yes ☐ No

Enter Wholesaler Names, separated by commas:

Metropolitan Water District of Southern California; San Diego County Water Authority

☒ Materials meet state education framework requirements?

Description of Materials

Materials are provided by SDCWA. 3rd and 4th grade history video/DVD; "Give Water a Second Chance...Re-cycle it!" for 5th grade; "Be Water Smart" DVD, water quality testing kit for high school science teachers' classroom use; "Water Science in a Box" for 1st, 2nd, and 3rd grades; "Watersheds and You" student workbook for 5th grade; "Water Works!" school-to-career curriculum; "WaterSmart Garden" curriculum.

☒ Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

Availability of materials promoted to all elementary school principals in Poway. 3rd and 4th grade history video/DVD. "Give Water a Second Chance...Re-cycle it!" booklet for 5th grade; "Be Water Smart" DVD for 4th-6th grades; "Water Science in a Box" for 1st, 2nd, and 3rd grades.

Number of students reached

☐ Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

Availability of materials promoted to all elementary school principals in Poway. Water quality testing kits are available to high school science teachers for use in their classrooms.

Number of Distribution

Annual budget for school education program

Description of all other water supplier education programs

Other programs offered by SDCWA include "Traveling Library" program, youth and scout patch program; 20-Gallon Challenge Student Pledge contest, Splash Science Mobile Lab; "H2O: Where did you go?" theatre program; SDCWA's annual budget for school education programs county-wide is \$450,500.

School Program Activities

Classroom presentations:

Number of presentations

18

Number of attendees

497

Large group assemblies:

Number of presentations

0

Number of attendees

0

Children's water festivals or other events:

Number of presentations

0

Number of attendees

0

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations

0

Number of attendees

0

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description	
Number distributed	0
Staffing children's booths at events & festivals:	
Number of booths	0
Number of attendees	0
Water conservation contests such as poster and photo:	
The City of Poway participated in a water awareness poster contest along with other water agencies from North San Diego County. Top entries were chosen for a 2011 calendar.	
Number distributed	200
Offer monetary awards/funding or scholarships to students:	
Number Offered	0
Total Funding	0
Teacher training workshops:	
Number of presentations	2
Number of attendees	3
Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:	
Number of tours or field trips	0
Number of participants	0
College internships in water conservation offered:	
Number of internships	2
Total funding	0
Career fairs/workshops:	
Number of presentations	1
Number of attendees	200
Additional program(s) supported by agency but not mentioned above:	
The Splash Lab visited Painted Rock Elementary on March 1-2, 2010, and reached 240 students. The traveling library display visited two schools and reached 43 classes and 1,371 students.	
Description	
Number of events (if applicable)	3
Number of participants	1,611
Total reporting period budget expenditures for school education programs (include all agency costs):	

Comments

Please see attached City of Poway 2010 BMP comment sheet.